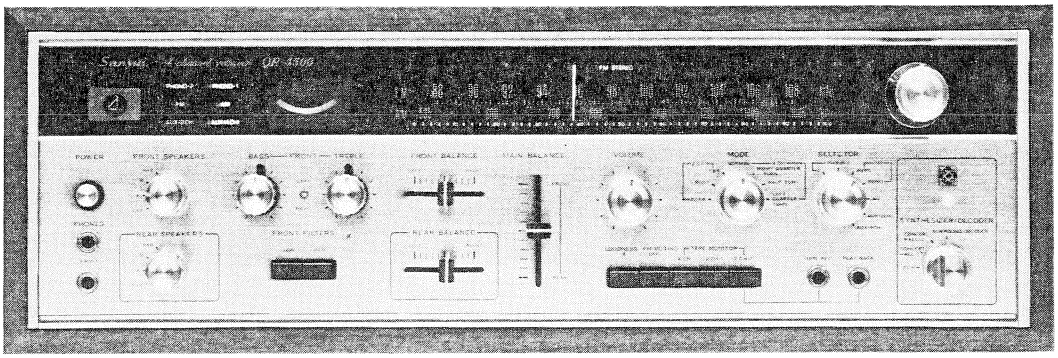
SERVICE MANUAL

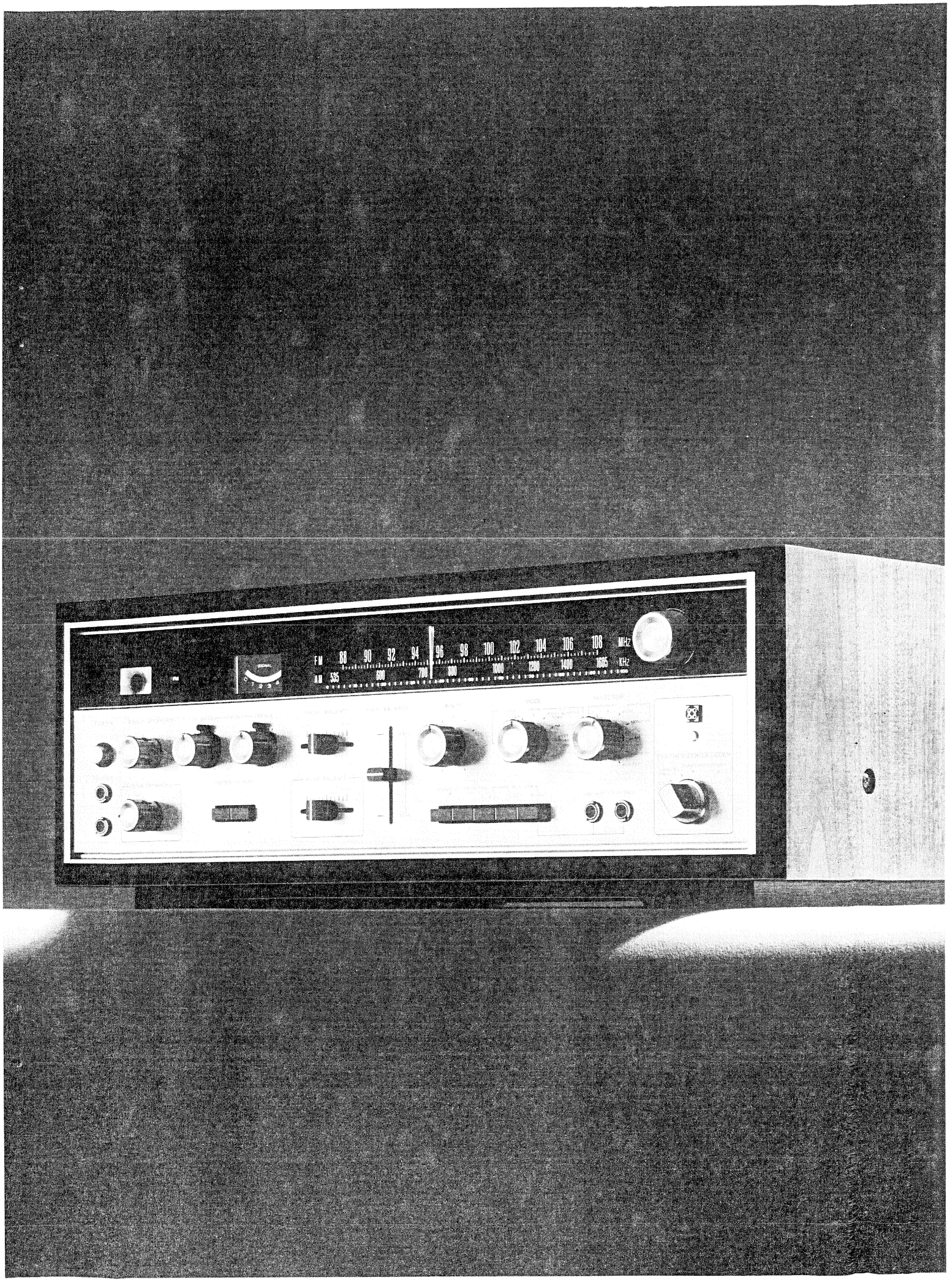
4-CHANNEL RECEIVER

SANSUI QR-4500



Sansui

SANSUI ELECTRIC COMPANY LIMITED


FM
AM
MHz
KHz

GENERAL TROUBLESHOOTING CHART

If the receiver is otherwise operating satisfactorily, the more common causes of trouble may generally be attributed to the following:

1. Incorrect connections or loose terminal contacts. Check the speakers, turntable, tape deck, antenna and power cord.

2. Improper operation. Before operating any audio component, be sure to read its manufacture's instructions.

3. Improper location of audio components. The proper positioning of components, such as speakers and turntable, is essential to the maximum stereo enjoyment.

4. Defective audio components.

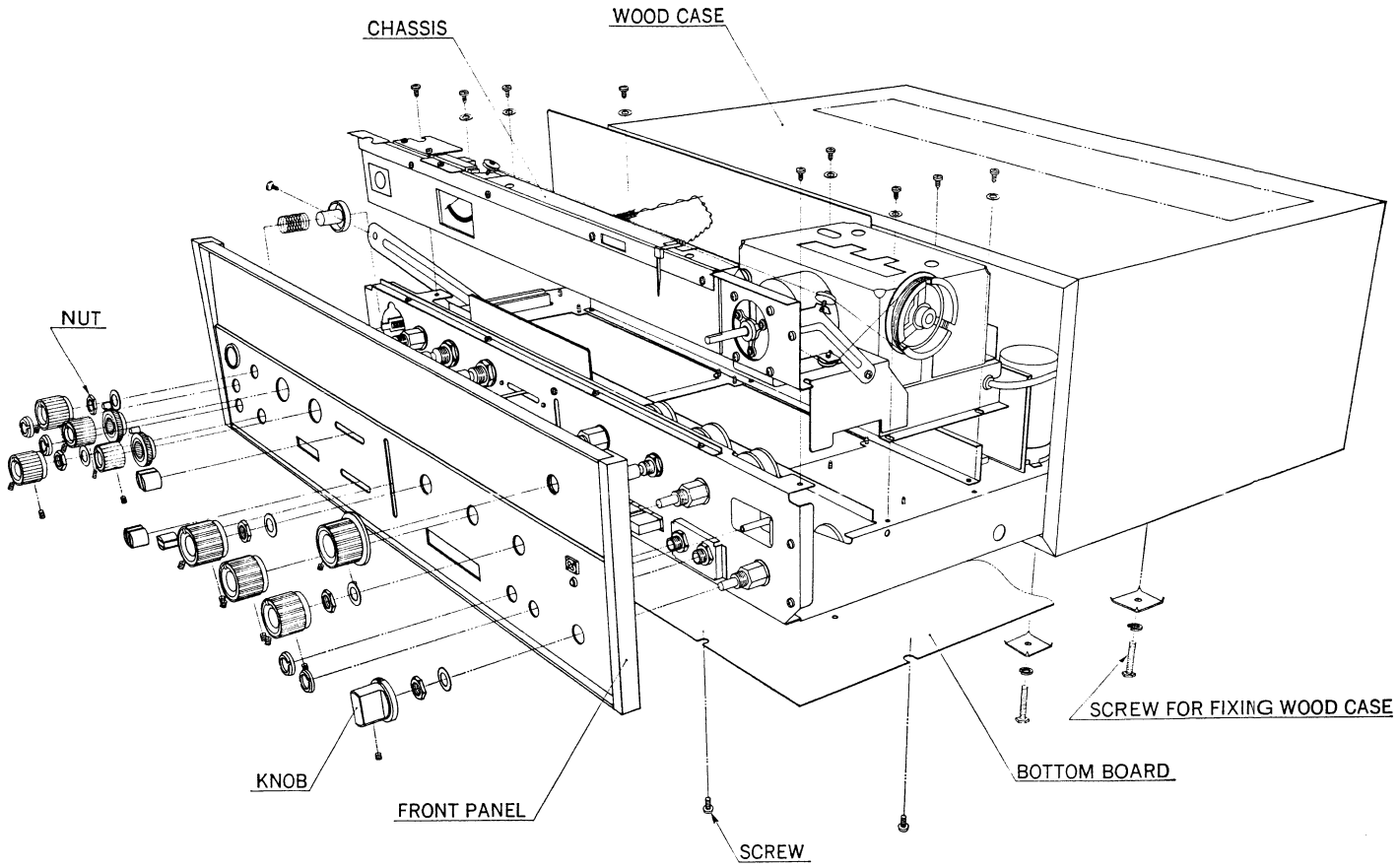
The following are some other common causes of malfunction and what to do about them.

PROGRAM	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
AM, FM or MPX reception	A. Constant or intermittent noise heard at times or in certain areas	* Discharge or oscillation caused by electrical appliances, such as fluorescent lamp, TV set, D.C. motor rectifier or oscillator. * Natural phenomena, such as atomospheric, static or thunderbolts * Insufficient antenna input due to ferroconcrete wall or long distance from station	* Attach noise limiter to electrical appliance producing noise, or attach it to the receiver's power source * Install outdoor antenna and ground receiver to raise SN ratio * Reverse power cord plug/receptacle connections * If noise occurs at certain frequency, attach wave trap to input * Keep receiver at proper distance from other electrical appliances
AM reception	A. Noise heard at a particular time of a day, in a certain area or over part of dial	* Peculiar to AM broadcasts	* Install antenna for maximum antenna efficiency. See "RADIO RECEPTION" in operating instructions booklet * In some cases, noise can be eliminated by grounding receiver or reversing power cord plug/receptacle connections
	B. High-frequency noise	* Adjacent-channel interference or beat interference * TV set too close to audio system	* Such noise cannot be completely eliminated by the receiver, but it is advisable to turn Treble control counterclockwise turn on High Filter * Keep TV set at proper distance from stereo system
FM reception	A. Noisy	* Poor noise limiter effect or too low SN ratio due to insufficient antenna input Note: FM reception is affected considerably by transmission conditions of station, such as power and antenna efficiency. As a result, you may receive one station quite well while receiving another station poorly.	* Install antenna (supplied) for maximum signal strength * If this does not prove effective, use exclusive FM outdoor antenna. If using TV antenna for both TV and FM with a divider, make sure TV reception is not affected * Exclusively long lead-in wire of antenna may cause noise
	B. A series of pops	* Ignition noise caused by starting of nearby automobile engine	* Install antenna and its lead-in wire at proper distance from street or increase antenna input as described before
	C. Tuning noise between stations	* Results from nature of FM reception * FM Muting Release switch depressed	* Release FM Muting Release switch * Ditto

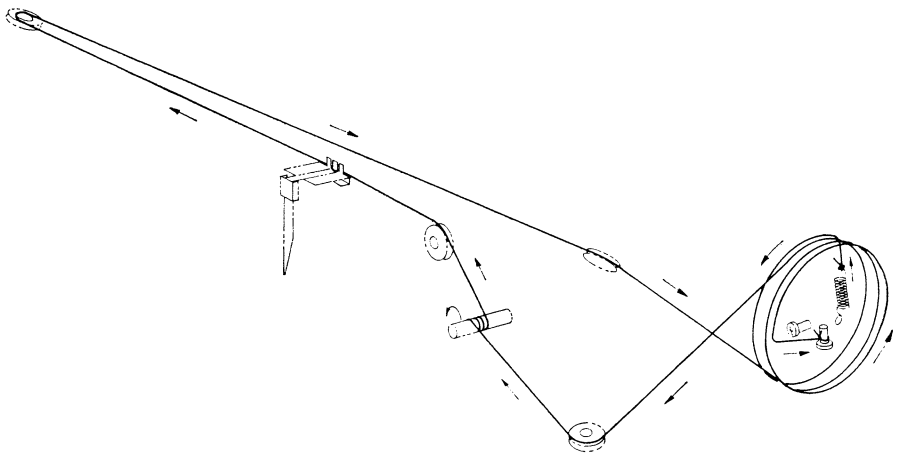
PROGRAM	SYMPTOM	PROBABLE CAUSE	WHAT TO DO
FM-MPX reception	A. Noise heard during FM-MPX reception but inaudible during FM mono reception	* Weaker signal because service area of FM-MPX broadcast is only half that of FM mono broadcast	* Orient antenna for maximum antenna input * Switch on High Filter and/on turn Treble control counterclockwise
	B. Channel separation deteriorates during reception	* Excess heat	* Circulation of room air is important to receiver. Be sure that receiver is well ventilated
	C. Stereo indicator blinks on and off	* Interference	* Indicator is not faulty, adjust VR_{402}
Record playing or tape playback	A. Hum or howling	* Turntable placed directly on speaker * Wire other than shielded cable used * Loose terminal contact * Shielded cable too close to power cord, fluorescent lamp or other appliances * Nearby amateur radio station or TV transmission antenna	* Place cusion between turntable and speaker cabinet or place them away from each other * Connecting shielded cables should be as short as possible * Turn on Low Filter and turn Bass control counterclockwise * Consult nearest Radio Regulatory Bureau
	B. Surface noise	* Worn or old record * Worn phono stylus * Phono stylus is dusty * Imploper stylus pressure	* Recondition playback head of tape deck or the stylus of turntable * Turn Treble control counterclockwise * Turn High Filter on
4-channel stereo playback	A. Position of musical instruments and voice not clear	* Incorrect phasing of speakers or input connections	* Check phasing of speakers and input connections * Change rear speaker position and/or direction

DISASSEMBLY PROCEDURE

REMOVING THE FRONT PANEL, WOOD CASE AND BOTTOM BOARD



DIAL MECHANISM



The Tuner Block, if necessary, can be independently separated from the rest of the receiver for examination and servicing purposes. To do so, follow these simple steps:

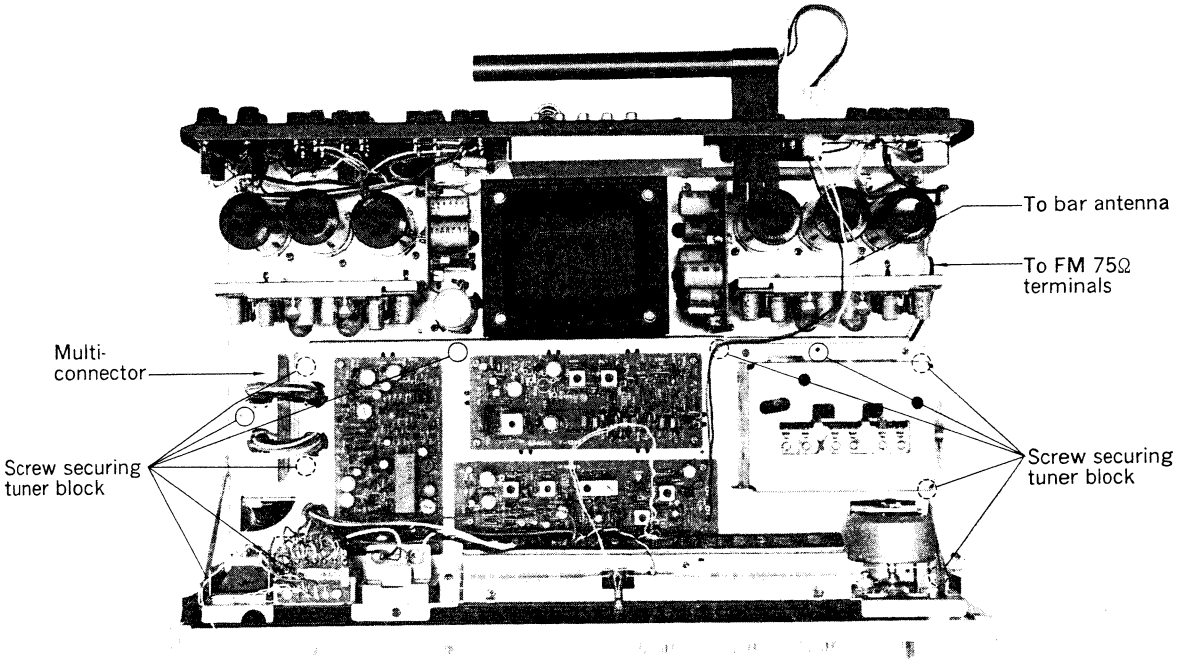
1. Remove the eleven screws fastening the Tuner Block to the receiver proper.

2. Free the Tuning Control and pull it out. The Tuner Block now floats freely off the receiver proper, but if you need disconnect it completely, move on to steps 3～5.

3. Unplug the multi-connector (see photo below) very carefully.

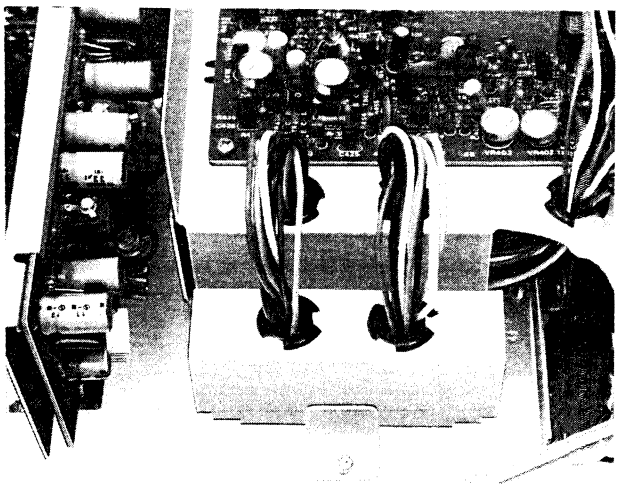
4. Pull off the lead wires of the AM ferrite bar antenna. (When you re-assemble, connect the grey wire to F-1038-5 (3A), the black one to F-1038-5 (3B), and the white one to VC_{001}).

5. Disconnect, in the middle, the coaxial cable connecting the FM 75Ω terminals to the FM Frontend.

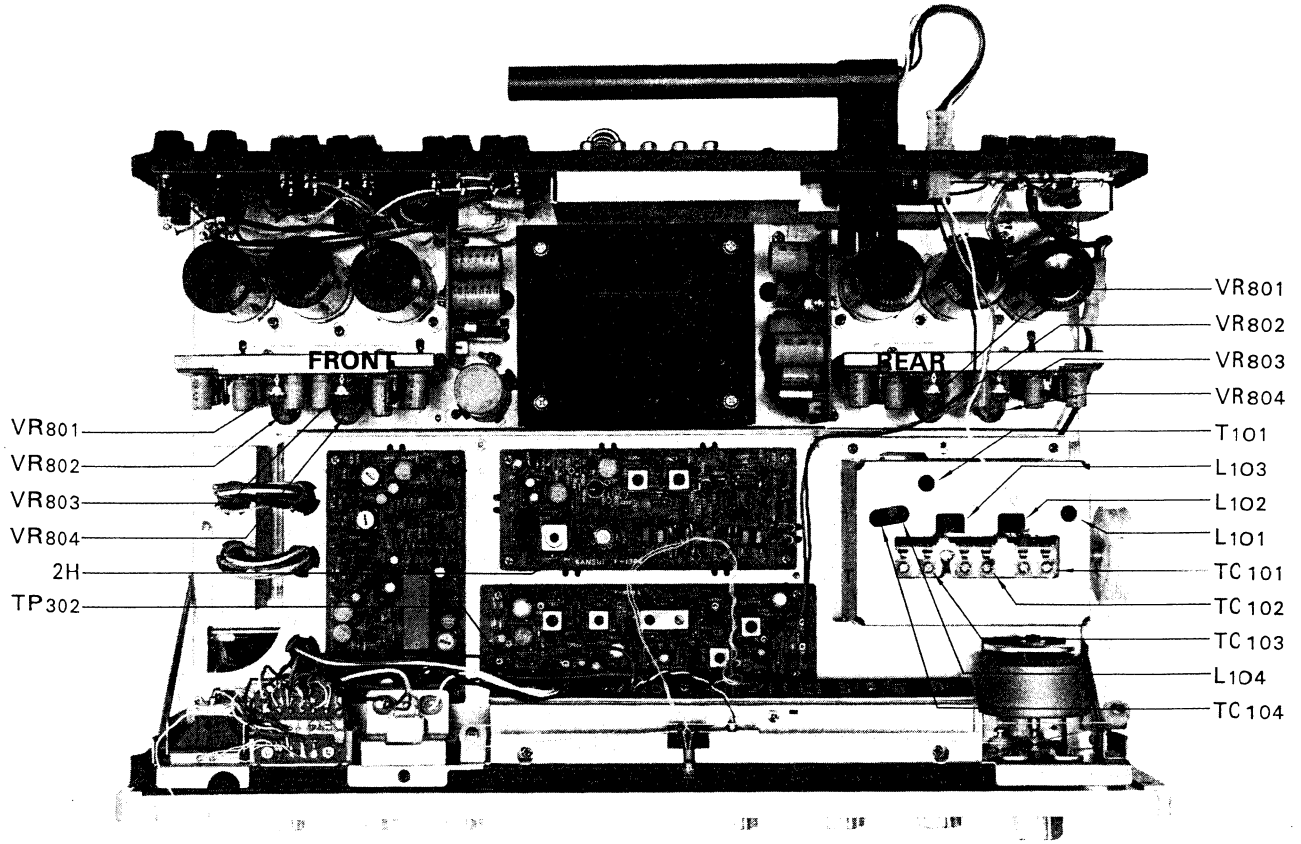


CAUTION

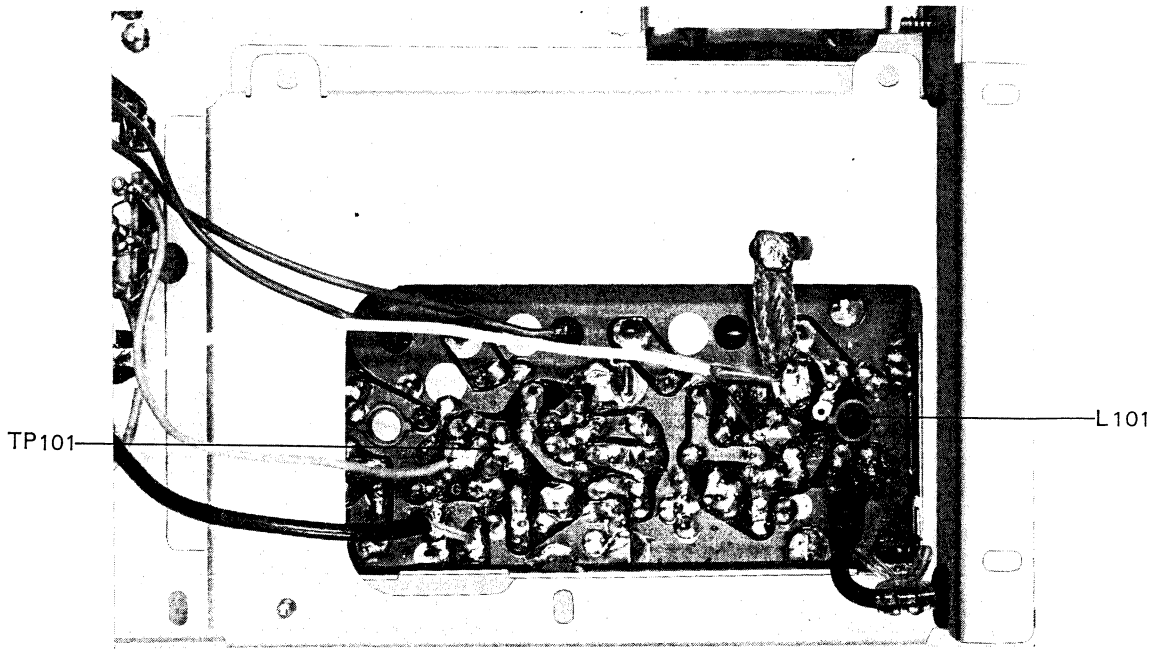
When re-inserting the multi-connector to align the Tuner Block already dismounted or to re-assemble the block itself, be very careful to insert it exactly the same way it was inserted before.



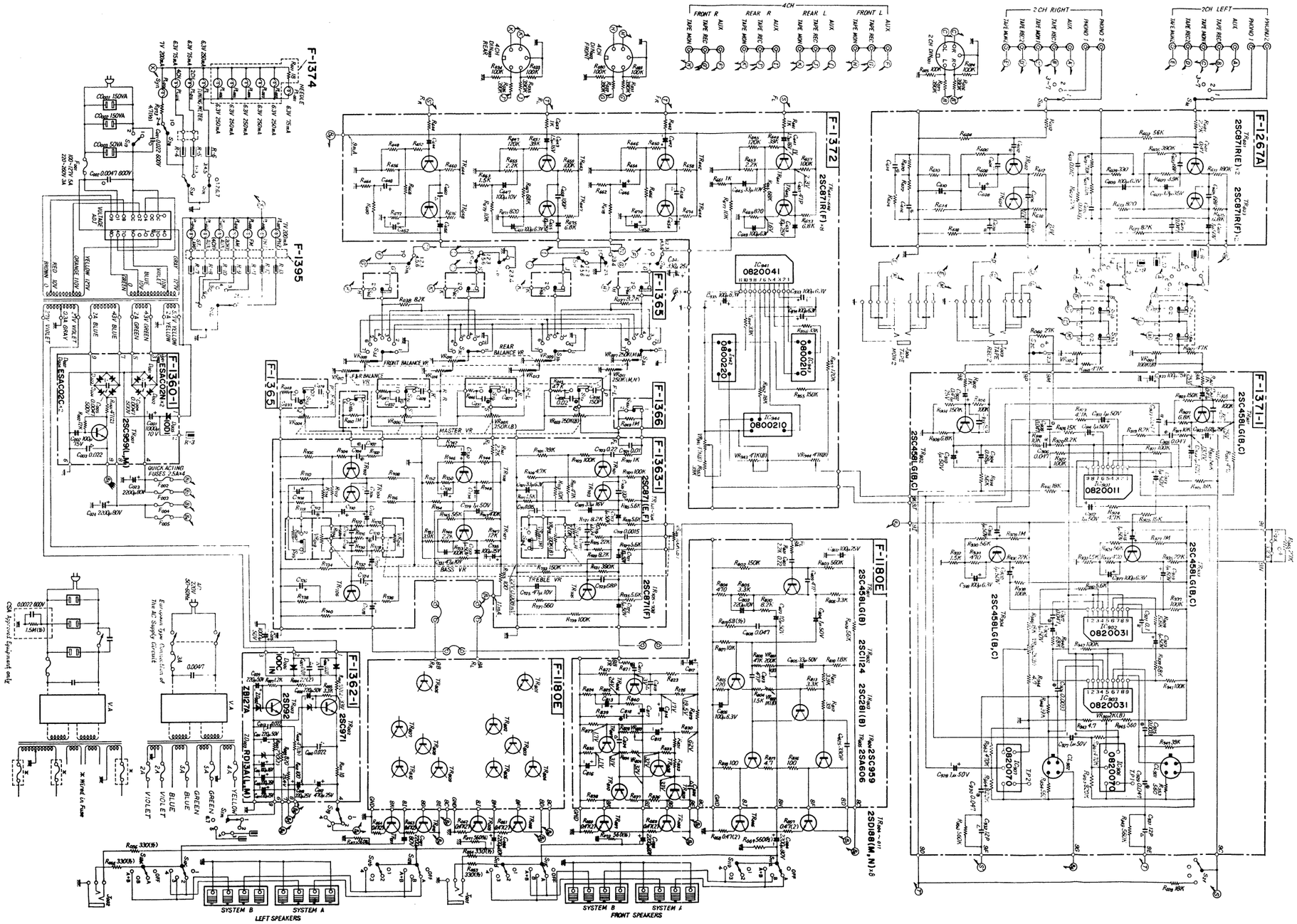
TEST POINTS



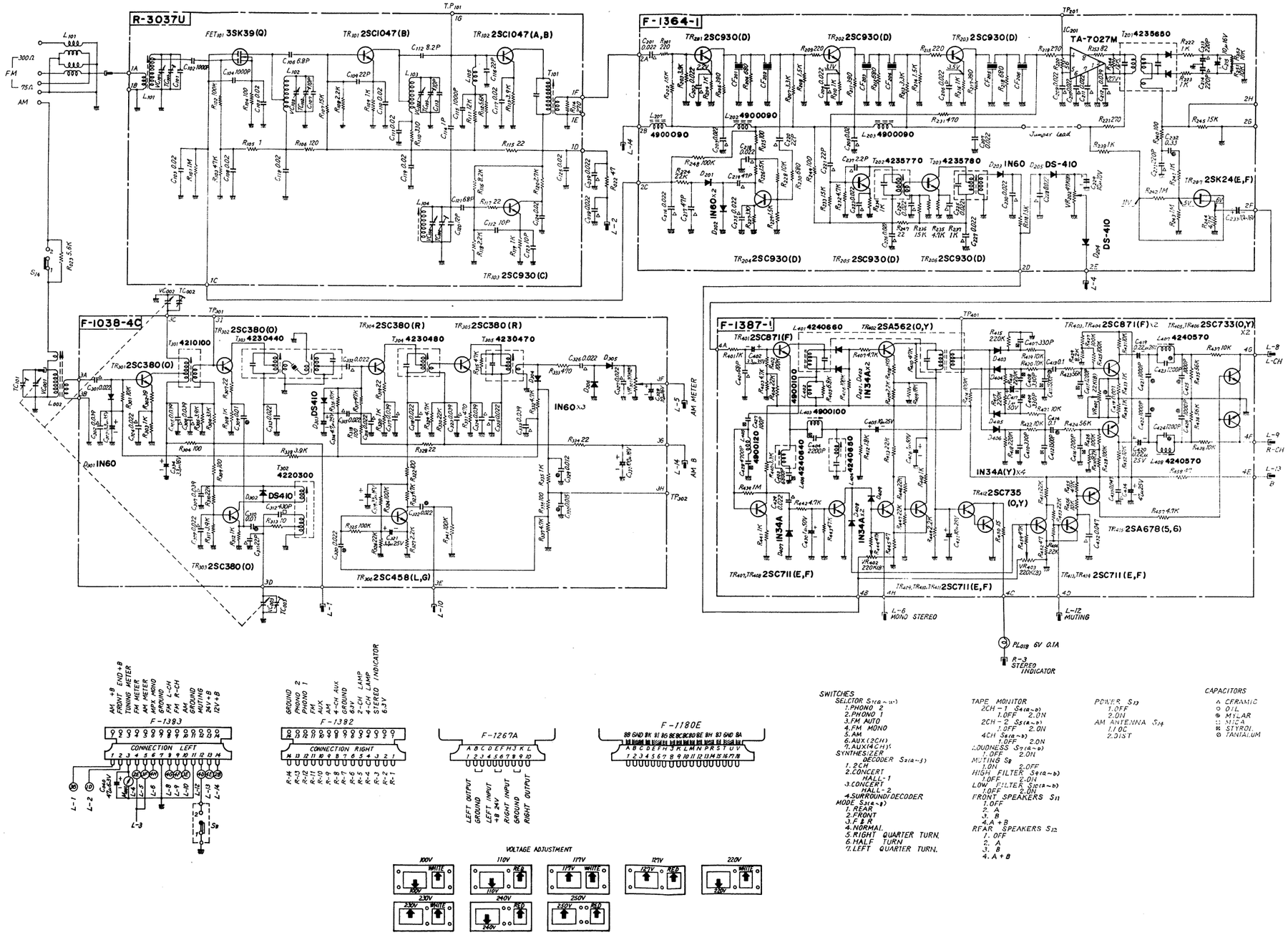
BOTTOM VIEW OF FM FRONTEND



SCHEMATIC DIAGRAM OF AUDIO SECTION



SCHEMATIC DIAGRAM OF TUNER SECTION



SWITCHES

SELECTOR $S_{1(a\sim u)}$
1. PHONO 2
2. PHONO 1
3. FM AUTO
4. FM MONO
5. AM
6. AUX (2CH)
7. AUX (4CH)

SYNTHESIZER DECODER $S_{2(a\sim f)}$
1. 2CH
2. CONCERT HALL-1
3. CONCERT HALL-2
4. SURROUND DECODER

MODE $S_{3(a\sim g)}$
1. REAR
2. FRONT
3. F + R
4. NORMAL
5. RIGHT QUARTER TURN
6. HALF TURN
7. LEFT QUARTER TURN

TAPE MONITOR
2CH-1 $S_{4(a\sim b)}$ 1. OFF 2. ON
2CH-2 $S_{5(a\sim b)}$ 1. OFF 2. ON
4CH $S_{6(a\sim b)}$ 1. OFF 2. ON

LOUDNESS $S_{7(a\sim b)}$ 1. OFF 2. ON

MUTING S_8 1. ON 2. OFF

HIGH FILTER $S_{9(a\sim b)}$ 1. OFF 2. ON

LOW FILTER $S_{10(a\sim b)}$ 1. OFF 2. ON

FRONT SPEAKERS S_{11} 1. OFF 2. A 3. B 4. A + B

REAR SPEAKERS S_{12} 1. OFF 2. A 3. B 4. A + B

POWER S_{13} 1. OFF 2. ON

AM ANTENNA S_{14} 1. DX 2. LOCAL

CAPACITORS
A CERAMIC
O OIL
M MYLAR
MI MICA
ST STYROL
T TANTALUM

ALIGNMENT

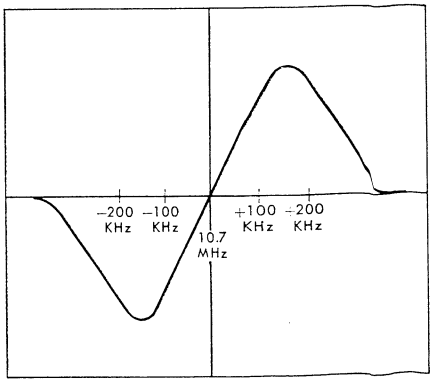
FM ALIGNMENT PROCEDURE

NOTE: Set the FM signal generator level to minimum first.

Any internal parts replacement or changes you make in the QR 4500 requiries proper adjustment again, Test points, adjustment procedures and schematic diagrams are given on pages 7~14.
Equipment required: 1. Sweep Generator 2. Oscilloscope 3. FM Signal Generatar 4. Multiplex Stereo Generator 5. AC V.T.V.M.

STEP	ALIGN	GENERATOR	FEED SIGNAL	OUTPUT INDICATOR	DIAL SETTING	ADJUST	ADJUST FOR
1.	Discriminator	10.7MHz ±200kHz Sweep generator	To TP_{101} via the 10pF ceramic capacitor	Oscilloscope is connected to 2H		FM Discriminator transformer T_{201} primary and secondary	S curve
2.	O.S.C.	FM signal generator 88MHz 400Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. at output load	88MHz	O.S.C. coil L_{104}	Maximum
3.	O.S.C.	FM signal generator 108MHz 400Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. at output load	108MHz	O.S.C. trimmer TC_{104}	Maximum
4.	Repeat 2 and 3						
5.	RF Amp. Circuit	FM signal generator 90MHz 400Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. at output load	90MHz	Antenna coil L_{101}, L_{102} and L_{103}	Maximum
6.	RF Amp. Circuit	FM signal generator 106MHz 400Hz 100% Modulation	To antenna terminals	Oscilloscope and V.T.V.M. at output load	106MHz	Trimmer TC_{101}, TC_{102} and TC_{103}	Maximum
7.	Repeat 5 and 6						

FM DISCRIMINATOR WAVE FORM



ALIGNMENT

FM MULTIPLEX CIRCUIT

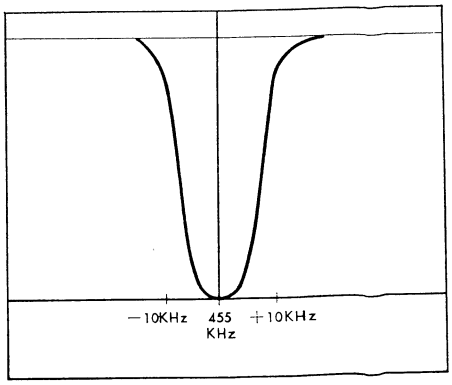
STEP	ALIGN	GENERATOR	FEED SIGNAL	OUTPUT INDICATOR	DIAL SETTING	ADJUST	ADJUST FOR
1.	19kHz phase	FM signal generator—98MHz Stereo signal generator —composite signal with pilot signal, left chan, 30% modulation.	To antenna terminal	Connect distortion meter to right channel load terminal	98MHz	L_{401}	Minimum distortion right chan.
2.	Stereo separation	Same as above	Same as above	Connect oscilloscope and V.T.V.M. to load terminal	Same as above	VR_{401}	Maximum separation

AM ALIGNMENT PROCEDURE

NOTE: To align, set the AM signal generator level to minimum.

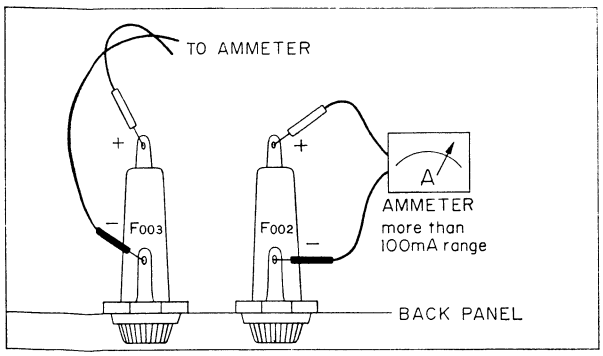
STEP	ALIGN	GENERATOR	FEED SIGNAL	OUTPUT INDICATOR	DIAL SETTING	ADJUST	ADJUST FOR
1.	IF Transformer	455kHz ±30kHz Sweep-generator	Antenna terminals	Oscilloscope and V.T.V.M. at TP_{302}		I.F.T. T_{303}~T_{305}	Best IF wave form
2.	O.S.C.	AM-generator 535kHz 400Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	535kHz	O.S.C. Coil T_{302}	Maximum
3.	O.S.C.	AM-generator 1600kHz 400Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	1600kHz	O.S.C. Trimmer cap. TC_{003}	Maximum
4.	Repeat 2 and 3						
5.	RF amp.	AM-generator 600kHz 400Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	600kHz	RF transformer T_{301}	Maximum
6.	Antenna circuit	AM-generator 600kHz 400Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	600kHz	Ferrite bar Antenna coil L_{002}	Maximum
7.	RF amp.	AM-generator 1400kHz 400Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	1400kHz	RF Trimmer TC_{002}	Maximum
8.	Antenna circuit	AM-generator 1400kHz 400Hz 30% Modulation	Antenna terminals	Oscilloscope and V.T.V.M. at output load	1400kHz	Antenna circuit Trimmer TC_{001}	Maximum
9.	Repeat 5, 6, 7, 8						

AM IF WAVE FORM



CURRENT ADJUSTMENT

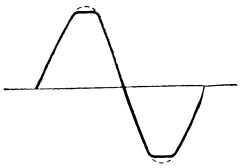
STEP	SETTING OF AMMETER (TESTER)	WHAT TO DO	NOTE
1.		Remove F_{002} and F_{003}	Use an ammeter with 100mA range
2.		Set VR_{302}) left and rignt channel) to minimum	
3.		Set Volume Control to minimum	
4.		Turn on the receiver	Be sure to switch on lst and the connect the ammeter
5.	100mA range.	Connect ammeter to F_{002} as illustrated in Fig. 1	
6.		Turn VR_{302} (left channel) clockwise and adjust current to 30 to 20 mA	
7.	100mA range.	Turn off the receiver and replace F_{002}	
8.		Turn on the receiver and connect ammeter to F_{003} as illustrated in Fig. 1	
9.		Turn VR_{303} (right channel) clockwise and adjust current to 30 to 20 mA	
10.		Replace F_{003}	
11.		Adjust the rear channels as above	



〈Fig. 1〉 QUICK-ACTING FUSE HOLDER

OUTPUT ADJUSTMENT

STEP	WHAT TO DO	NOTE
1.	Adjust volume control to minimum	
2.	Set oscillator to 1,000Hz and connect it to 4CH AUX LEFT FRONT input	Oscillator used should have oscillation frequency of 20 to 20,000Hz and output voltage of more than 200mV
3.	Set Selector switch to AUX (4CH)	Set other controls and switches as follows: Balance to CENTER Tape Monitor to OFF Mode to NORMAL Tone to CENTER Other to OFF
4.	Connect 8- or 16-ohm load resistor with capacity of more than 30 watts to LEFT SPEAKER output	
5.	Connect oscilloscope to SPEAKER terminal	
6.	Turn on the receiver and slowly raise volume. Check output at terminal by means of oscilloscope	
7.	Adjust VR_{801} (left channel) so that peak of sine wave is clipped simultaneously	
8.	Adjust right chnnel similarly, and then rear channels	



PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

FM IF BLOCK 〈F-1364-1〉

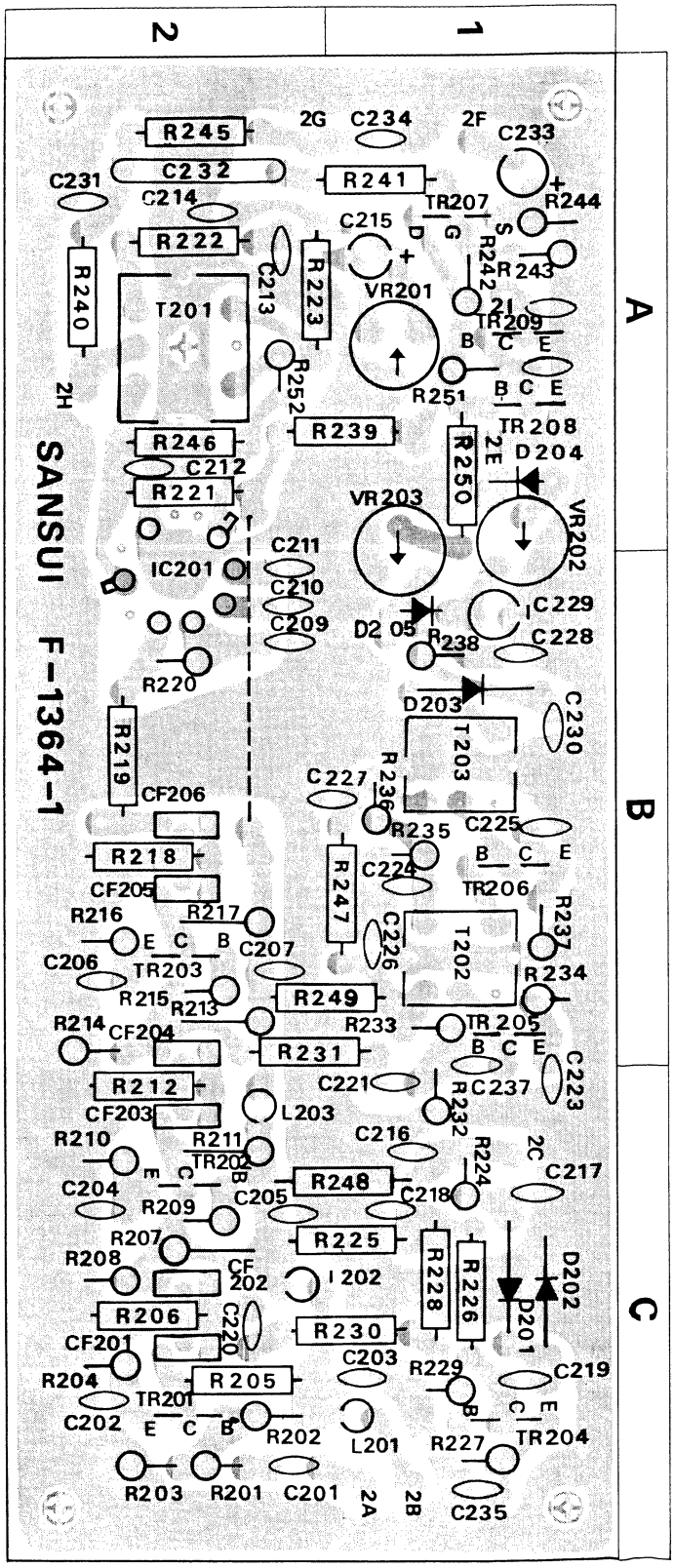
W	X	Y	Z
R201	220Ω	0100221	2 C
R202	15kΩ	0100153	2 C
R203	3.9kΩ	0100392	2 C
R204	1kΩ	0100102	2 C
R205	390Ω	0101391	2 C
R206	680Ω	0101681	2 C
R207	3.3kΩ	0100332	2 C
R208	1.5kΩ	0100152	2 C
R209	220Ω	0100221	2 C
R210	1kΩ	0100102	2 C
R211	390Ω	0100391	2 C
R212	680Ω	0101681	2 C
R213	3.3kΩ	0100332	2 B
R214	1.5kΩ	0100152	2 B
R215	220Ω	0100221	2 B
R216	1kΩ	0100102	2 B
R217	390Ω	0100391	2 B
R218	680Ω	0101681	2 B
R219	270Ω	0101271	2 B
R220	56Ω	0100560	2 B
R221	270Ω	0101271	2 A
R222	1kΩ	0101102	2 A
R223	1kΩ	0101102	2 A
R224	22kΩ	0100223	1 C
R225	100Ω ±10% ¼W CR.	0101101	1, 2 C
R226	1.5kΩ	0101152	1 C
R227	330Ω	0100331	1 C
R228	10kΩ	0101103	1 C
R229	1.5kΩ	0100152	1 C
R230	680Ω	0101681	1, 2 C
R231	470Ω	0101471	1, 2 B
R232	4.7kΩ	0100472	1 C
R233	15kΩ	0100153	1 B
R234	1kΩ	0100102	1 B
R235	4.7kΩ	0100472	1 B
R236	15kΩ	0101153	1 B
R237	1kΩ	0100102	1 B
R238	1.5kΩ	0100152	1 B
R239	1kΩ	0101102	1, 2 A
R240	100Ω	0101101	2 A
R241	1kΩ	0101102	1 A
R242	1MΩ	0100105	1 A
R243	1MΩ	0100105	1 A
R244	4.7kΩ	0100472	1 A
R245	15kΩ	0101153	2 A
R246	12kΩ	0101123	2 A
R247	22Ω	0101220	1 B
R248	100kΩ	0101104	1, 2 C
R249	100Ω	0101101	1, 2 B
R251	10kΩ	0100103	1 A
R252	10kΩ ±10% ¼W CR.	0100103	2 A
R253	82Ω	0101820	2 B

W	X	Y	Z
VR202	47kΩ(B)	1035170	1 A, B
C201	0.022μF	0656223	2 C
C202	0.022μF	0656223	2 C
C203	0.022μF	0656223	1 C
C204	0.022μF	0656223	2 C
C205	0.022μF	0656223	2 C
C206	0.022μF +80 −20% 25 V CC.	0656223	2 B
C207	0.022μF	0656223	2 B
C209	0.022μF	0656223	2 B
C210	0.022μF	0656223	2 B
C211	0.022μF	0656223	2 B
C212	0.039μF	0656393	2 A
C213	220pF ±10% 50 V CC.	0660221	2 A
C214	220pF	0660221	2 A
C215	10μF 10 V CC.	0511100	1 A
C216	0.022μF +80 −20% 25 V CC.	0656223	1 C
C217	47pF ±10% 50 V CC.	0660470	1 C
C218	0.022μF +80 −20% 25 V CC.	0656223	1 C
C219	47pF ±10% 50 V CC.	0660470	1 C
C220	22pF ±10% 50 V CC.	0660220	2 C
C221	22pF	0660220	1 C
C223	0.022μF	0656223	1 B, C
C224	0.022μF	0656223	1 B
C225	0.022μF +80 −20% 25 V CC.	0656223	1 B
C226	0.022μF	0656223	1 B
C227	0.022μF	0656223	1, 2 B
C228	0.022μF	0656223	1 B
C229	10μF 10 V EC.	0511100	1 B
C230	0.022μF +80 −20% 25 V CC.	0656223	1 B
C231	220pF ±10% 50 V CC.	0660221	2 A
C232	0.33μF ±10% 50 V MC.	0601338	2 A
C233	10μF 10 V EC.	0511100	1 A
C235	0.022μF +80 −20% 25 V CC.	0656223	1 C
C237	2.2pF ±10% 50 V CC.	0660229	1 B
TR201	2SC930(D)	0305791	2 C
TR202		0305791	2 C
TR203		0305791	2 B
TR204		0305791	1 C
TR205		0305791	1 B
TR206		0305791	1 B
TR207	2SK24 (E, F)	0370060, 1	1 A
IC201	TA-7027M	0360020	2 B
D201	IN60	0310330	1 C
D202		0310330	1 C
D203		0310330	1 B
D204	DS-410	0340030	1 A
D205	DS-410	0340030	1 B

W	X	Y	Z
CF201	CFR 10.7M Ceramic Filter	0910101	2C
CF202		0910101	2C
CF203		0910101	2C
CF204		0910101	2B
CF205		0910101	2B
CF206		0910101	2B
T201	Discriminating Transformer	4235650	2A
T202	Meter Coil	4235770	1B
T203		4235780	1B
L201	3.3μH Micro Inductor	4900100	1C
L202		0100102	2C
L203		0100104	2C

Abbreviations

CR : Carbon Resistor
SR : Solid Resistor
CeR : Cement Resistor
MC : Mylar Capacitor
EC : Electrolytic Capacitor
AEC : Aluminum Solid Electrolytic Capacitor
CC : Ceramic Capacitor
MiC : Mica Capacitor
SC : Styrol Capacitor
TC : Tantalum Capacitor
OC : Oil Capacitor



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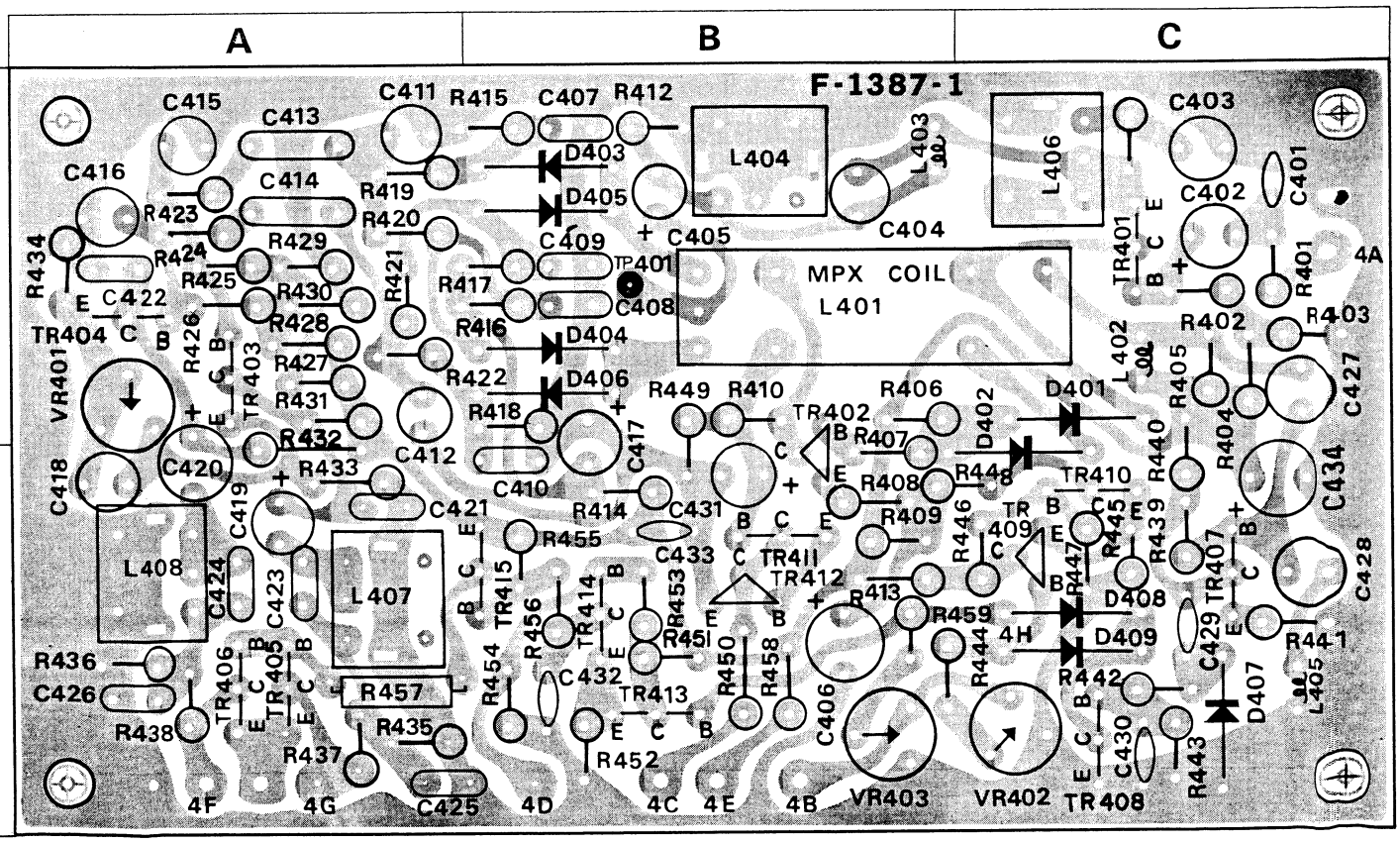
FM MPX BLOCK 〈F-1387-1〉

W	X	Y	Z
R401	1kΩ ⎫	0100102	1C
R402	100kΩ ⎪	0100104	1C
R403	4.7kΩ ⎪	0100472	1C
R404	22kΩ ⎪	0100223	1C
R405	6.8kΩ ⎪	0100682	1C
R406	100kΩ ⎪	0100104	1B
R407	4.7kΩ ⎪	0100472	2B
R408	150Ω ⎪	0100151	2B
R409	2.2kΩ ⎪	0100222	2B
R410	47kΩ ⎪	0100473	1B
R412	1.8kΩ ⎪	0100182	1B
R413	22kΩ ⎪	0100223	2B
R414	100kΩ ⎪	0100104	2B
R415	220kΩ ⎪	0100224	1B
R416	220kΩ ⎪	0100224	1B
R417	220kΩ ⎪	0100224	1B
R418	220kΩ ⎪	0100224	1B
R419	10kΩ ⎪	0100103	1A
R420	10kΩ ⎪	0100103	1A
R421	10kΩ ⎪	0100103	1A
R422	10kΩ ⎪	0100103	1A
R423	56kΩ ⎪	0100563	1A
R424	56kΩ ⎪	0100563	1A
R425	100kΩ ⎪	0100104	1A
R426	100kΩ ⎪	0100104	1A
R427	100kΩ ⎪ ±10% ¼W CR.	0100104	1A
R428	100kΩ ⎪	0100104	1A
R429	8.2kΩ ⎪	0100822	1A
R430	8.2kΩ ⎪	0100822	1A
R431	10kΩ ⎪	0100103	1A
R432	10kΩ ⎪	0100103	2A
R433	1kΩ ⎪	0100102	2A
R434	1kΩ ⎪	0100102	1A
R435	56kΩ ⎪	0100563	2A
R436	56kΩ ⎪	0100563	2A
R437	10kΩ ⎪	0100103	2A
R438	10kΩ ⎪	0109103	2A
R439	1MΩ ⎪	0100105	2C
R440	3.3kΩ ⎪	0100332	1, 2C
R441	1kΩ ⎪	0100102	2C
R442	4.7kΩ ⎪	0100472	2C
R443	47kΩ ⎪	0100473	2C
R444	47kΩ ⎪	0100473	2B
R445	47Ω ⎪	0100470	2C
R446	22kΩ ⎪	0100223	2C
R447	22kΩ ⎪	0100223	2C
R448	1kΩ ⎪	0100102	2B, C
R449	2.2kΩ ⎪	0100222	1, 2B
R450	15Ω ⎪	0100150	2B
R451	22kΩ ⎪	0100223	2B
R452	47Ω ⎭	0100470	2B

W	X	Y	Z
R453	22kΩ ⎫	0100223	2B
R454	22kΩ ⎪	0100223	2B
R455	47kΩ ⎪	0100473	2B
R456	10kΩ ⎪ ±10% ¼W CR.	0100103	2B
R457	4.7kΩ ⎪	0101472	2A
R458	47Ω ⎪	0100470	2B
R459	47kΩ ⎪	0100473	2B
R469	18kΩ ⎭	0101183	
VR401	22kΩ (B)	1035150	1A
VR402	220kΩ (B)	1035210	2C
VR403	220kΩ (B)	1035210	2B
C401	68pF ±10% 50 V CC.	0660680	1C
C402	3.3μF 25 V EC.	0513339	1C
C403	6800pF ± 5% 50 V SC.	0629001	1C
C404	2200pF ±10% 50 V SC.	0621222	1B
C405	10μF 25 V EC.	0513100	1B
C406	1μF 50 V EC.	0515109	2B
C407	330pF ⎫	0612331	1B
C408	330pF ⎪ ± 5% 125V SC.	0612331	1B
C409	330pF ⎪	0612331	1B
C410	330pF ⎭	0612331	2B
C411	1500pF ⎫ ± 5% 50V SC.	0620152	1A
C412	1500pF ⎭	0620152	1A
C413	0.1μF ⎫ ±10% 50 V MC.	0601108	1A
C414	0.1μF ⎭	0601108	1A
C415	1200pF ⎫ ± 5% 50 V SC.	0620122	1A
C416	1200pF ⎭	0620122	1A
C417	1μF 50 V EC.	0515109	1, 2B
C418	0.001μF ±10% 50 V MC.	0601106	2A
C419	0.22μF ⎫ ±20% 25 V AEC.	0563228	2A
C420	0.22μF ⎭	0563228	1, 2A
C421	0.001μF ⎫ ±10% 50 V MC.	0601106	2A
C422	0.001μF ⎭	0601106	1A
C423	0.0012μF ⎫ ±10% 50 V MC.	0601126	2A
C424	0.0012μF ⎭	0601126	2A
C425	0.001μF ⎫ ±10% 50 V MC.	0601106	2A, B
C426	0.001μF ⎭	0601106	2A
C427	100pF ⎫ ±10% 50 V SC.	0621101	1C
C428	4700pF ⎭	0621472	2C
C429	0.022μF +80% −20% 25 V CC.	0656223	2C
C430	1μF 50 V EC	0515109	2C
C431	10μF 25 V EC.	0513100	2B
C432	0.047μF ⎫ +80% −20% 25 V CC.	0656473	2B
C433	0.047μF ⎭	0656473	2B
C434	47μF 25 V EC.	0513470	2C
TR401	2SC871 (F)	0305472	1C
TR402	2SA562 (O, Y)	0300220, 1	1, 2B
TR403	2SC871 (F)	0305472	1A
TR404		0305472	1A
TR405	2SC733 (O, Y)	0305370, 1	2A

W	X	Y	Z
TR406	2SC733 (O, Y)	0305370, 1	2 A
TR407	2SC711 (E, F)	0305731, 2	2 C
TR408		0305731, 2	2 C
TR409		0305731, 2	2 C
TR410		0305731, 2	2 C
TR411		0305731, 2	2 B
TR412	2SC735 (O, Y)	0305640, 1	2 B
TR413	2SC711 (E, F)	0305731, 2	2 B
TR414		0305731, 2	2 B
TR415	2SA678 (5, 6)	0300290, 1	2 B
D401	IN34A	0310400	1 C
D402		0310400	2 C
D403	IN34A (Y)	0310401	1 B
D404		0310401	1 B
D405		0310401	1 B
D406		0310401	1 B
D407	IN34A (BL)	0310400	2 C
D408	IN34A (Y)	0310401	2 C
D409		0310401	2 C
L401	MPX Coil	4240660	1 B , C

W	X	Y	Z
L402	2.2mH Micro Inductor	4900100	1 C
L403		4900100	1 B
L404	MPX Coil	4240650	1 B
L405	1mH Micro Inductor	4900120	2 C
L406	MPX Coil	4240640	1 C
L407		4240570	2 A
L408		4240570	2 A



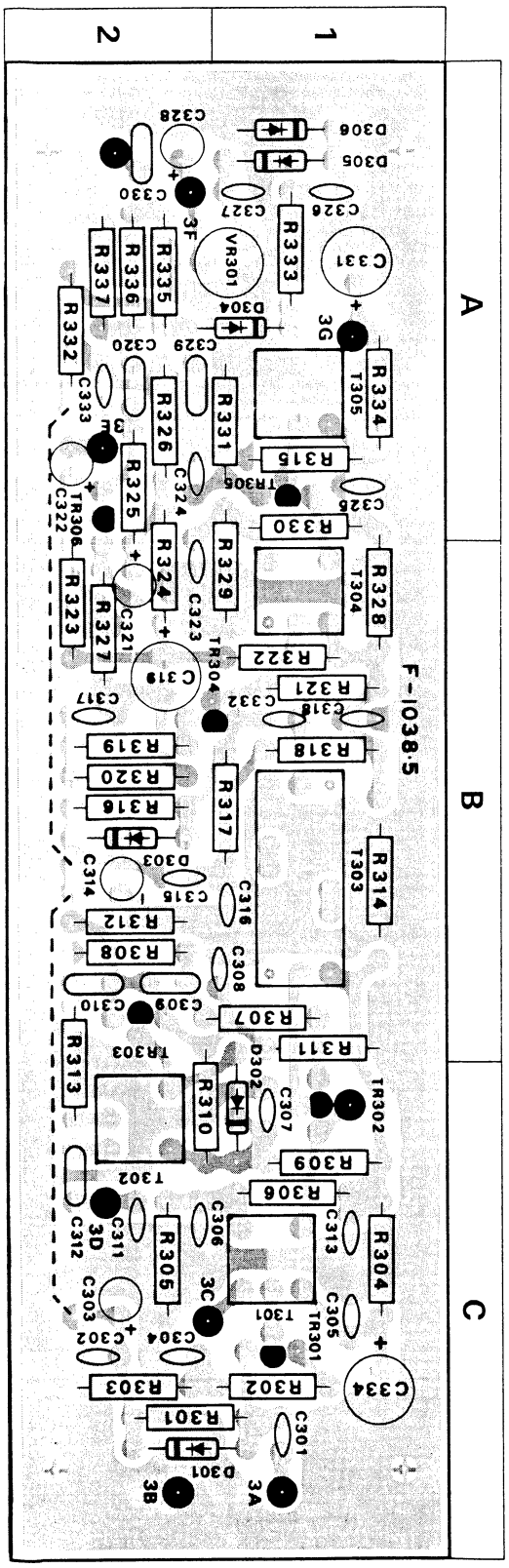
PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

AM BLOCK 〈F-1038-4C〉

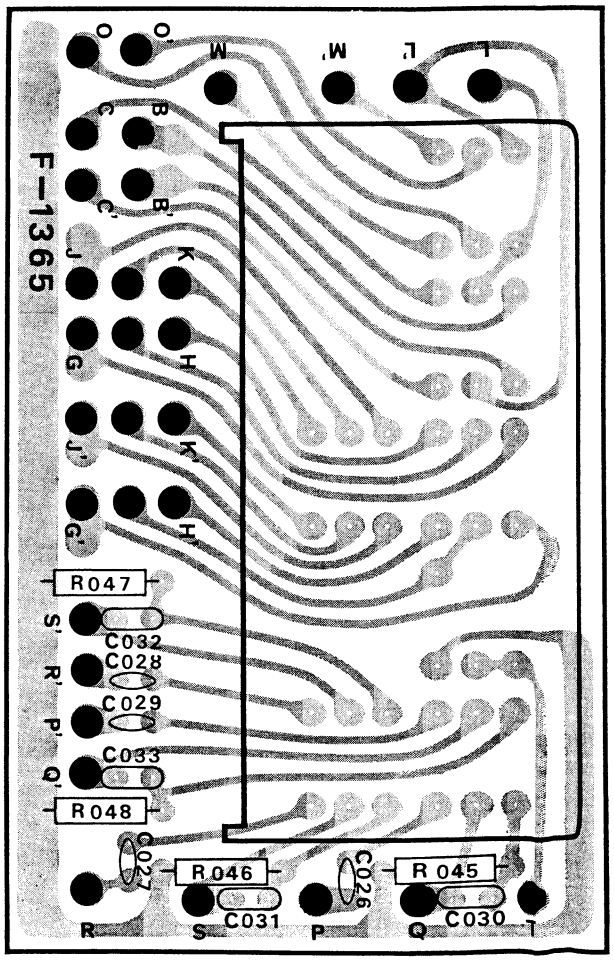
W	X	Y	Z
R301	10kΩ	0101103	1, 2C
R302	39Ω	0101390	1C
R303	1kΩ	0101102	2C
R304	100Ω	0101101	1C
R305	3.9kΩ	0101392	2C
R306	33kΩ	0101333	1C
R307	22Ω	0101220	1, 2B
R308	1kΩ	0101102	2B
R309	100Ω	0101101	1C
R310	22kΩ	0101223	2B, C
R311	3.9kΩ	0101392	1B
R312	1kΩ	0101102	2B
R313	10Ω	0101100	2B, C
R314	22Ω	0101220	1B
R315	47kΩ	0101473	1A
R316	10kΩ	0101103	2B
R317	47kΩ	0101473	1B
R318	100Ω	0101101	2B
R319	22Ω ±10 1/4W CR.	0101220	2B
R320	1kΩ	0101102	1B
R322	100Ω	0101101	1B
R323	4.7kΩ	0101472	2B
R324	100kΩ	0101104	2A, B
R325	100kΩ	0101104	2A, B
R326	22kΩ	0101223	2A
R327	2.2kΩ	0101222	2B
R328	22Ω	0101220	1A, B
R329	4.7kΩ	0101472	1A, B
R330	22kΩ	0101223	1A
R331	470Ω	0101471	1A
R332	4.7kΩ	0101472	2A
R333	470Ω	0101471	1A
R334	22Ω	0101220	1A
R335	1kΩ	0101102	2A
R336	100Ω	0101101	2A
R337	4.7kΩ	0101472	2A
R338	3.9kΩ	0101392	2A
R341	100kΩ	0101104	
VR301	10kΩ (B) AM Meter Adj.	1035130	1, 2A
C301	0.022μF +80% −20% 25 V CC.	0656223	1C
C302	0.039μF +80% −20% 25 V CC.	0656393	2C
C303	3.3μF 25 V EC.	0513339	2C
C304	0.022μF	0656223	2C
C305	0.039μF	0656393	1C
C306	0.039μF +80% −20% 25 V CC.	0656393	2C
C307	0.039μF	0656393	1C
C308	0.022μF	0656223	1B
C309	0.01μF ±10% 50 V MC.	0601107	2B
C310	0.01μF ±10% 50 V MC.	0601107	2B
C311	22pF ±10% 50 V CC.	0660220	2C
C312	430pF ± 5% 50 V MiC.	0640431	2C

W	X	Y	Z
C313	0.022μF +80% −20% 25 V CC.	0656223	1C
C314	4.7μF 16 V EC.	0512479	2B
C315	0.022μF	0656223	2B
C316	0.022μF +80% −20% 25 V CC.	0656223	1B
C317	0.039μF	0656393	2B
C318	0.022μF	0656223	1B
C319	33μF 16 V EC.	0512330	2B
C320	0.022μF ±10% 50 V MC.	0601227	2A
C321	3.3μF 25 V EC.	0513339	2B
C322	0.022μF ±10% 50 V MC.	0601227	2A
C323	0.039μF	0656393	2B
C324	0.039μF	0656393	2A
C325	0.022μF +80% −20% 25 V CC.	0656223	1A
C326	0.022μF	0656223	1A
C327	0.022μF	0656223	1A
C328	10μF 16 V EC.	0512100	2A
C329	0.012μF ±10% 50 V MC.	0601127	2A
C330	0.015μF ±10% 50 V MC.	0601157	2A
C331	100μF 16 V EC.	0512101	1A
C332	0.022μF +80% −20% 25 V CC.	0656223	1B
C333	0.039μF +80% −20% 25 V CC.	0656393	2A
C334	33μF 16 V EC.	0512330	1C
TR301	2SC380 (O)	0305331	1C
TR302	2SC380 (O)	0305331	1C
TR303	2SC380 (O)	0305331	2B
TR304	2SC380 (R)	0305330	1, 2B
TR305	2SC380 (R)	0305330	1A
TR306	2SC458LG (C)	0305320	2A
D301	IN60	0310330	1, 2C
D303	DS-410	0340030	1C
D303	DS-410	0340030	2B
D304	IN60	0310330	1, 2A
D305	IN60	0310330	1A
D306	IN60	0310330	1A
T301	AM RFT	4210100	1C
T302	AM OSC Coil	4220300	2C
T303	Ceramic Filter	4230440	1B
T304	AM IFT 455kHz	4230480	1B
T305	AM IFT 455kHz	4230470	1A



SWITCH BLOCK 〈F-1365〉

W	X	Y
R045	33kΩ	0101333
R046	33kΩ	0101333
R047	33kΩ	0101333
R048	33kΩ	0101333
	±10% 1/4W CR.	
C026	150pF	0660151
C027	150pF	0660151
C028	150pF	0660151
C029	150pF	0660151
	±10% 50 V CC.	
C030	0.02μF	0601207
C031	0.02μF	0601207
C032	0.02μF	0601207
C033	0.02μF	0601207
	±10% 50 V MC.	
S4(a,b)	2CH-1 Tape Monitor Switch	
S5(a,b)	2CH-2 Tape Monitor Switch	
S6(a~d)	4-Channel Tape Monitor Switch	1130420
S7(a~d)	Loudness Switch	
S8	FM Muting Release Switch	



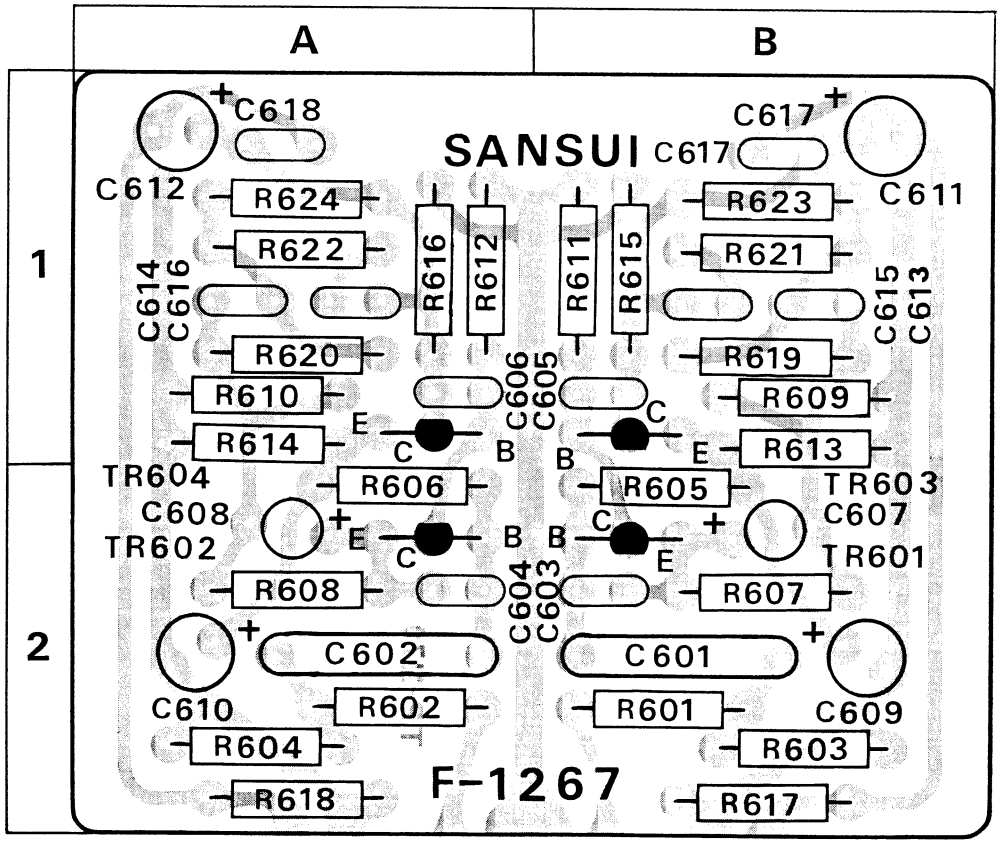
PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

EQUALIZER BLOCK 〈F-1267A〉

W	X	Y	Z
R601	2.2kΩ ±10% ¼W CR.	0101222	2 B
R602	2.2kΩ	0101222	2 A
R603	56kΩ	0101563	2 B
R604	56kΩ	0101563	2 A
R605	390kΩ	0101394	2 B
R606	390kΩ	0101394	2 A
R607	3.9kΩ	0101392	2 B
R608	3.9kΩ	0101392	2 A
R609	330Ω	0101331	1 B
R610	330Ω	0101331	1 A
R611	180kΩ	0101184	1 B
R612	180kΩ	0101184	1 A
R613	820Ω	0101821	1 B
R614	820Ω	0101821	1 A
R615	6.8kΩ	0101682	1 B
R616	6.8kΩ	0101682	1 A
R617	82kΩ	0101823	2 B
R618	82kΩ	0101823	2 A
R619	270kΩ	0101274	1 B
R620	270kΩ	0101274	1 A
R621	1kΩ	0101102	1 B
R622	1kΩ	0101102	1 A
R623	22kΩ	0101223	1 B
R624	22kΩ	0101223	1 A

W	X	Y	Z
C601	0.47μF ±10% 50 V MC.	0601478	2 B
C602	0.47μF	0601478	2 A
C603	68pF 50 V CC.	0660680	2 B
C604	68pF	0660680	2 A
C605	68pF	0660680	1 B
C606	68pF	0660680	1 A
C607	3.3μF 25 V EC.	0513339	2 B
C608	3.3μF	0513339	2 A
C609	100μF 6.3 V EC.	0510101	2 B
C610	100μF	0510101	2 A
C611	1μF 50 V EC.	0515109	1 B
C612	1μF	0515109	1 A
C613	0.012μF ±10% 50 V MC.	0601127	1 B
C614	0.012μF	0601127	1 A
C615	0.003μF	0601306	1 B
C616	0.003μF	0601306	1 A
C617	0.047μF	0601477	1 B
C618	0.047μF	0601477	1 A
TR601	2SC871R(E)	0305474	2 B
TR602	2SC871R(E)	0305474	2 A
TR603	2SC871R(F)	0305475	2 B
TR604	2SC871R(F)	0305475	2 A



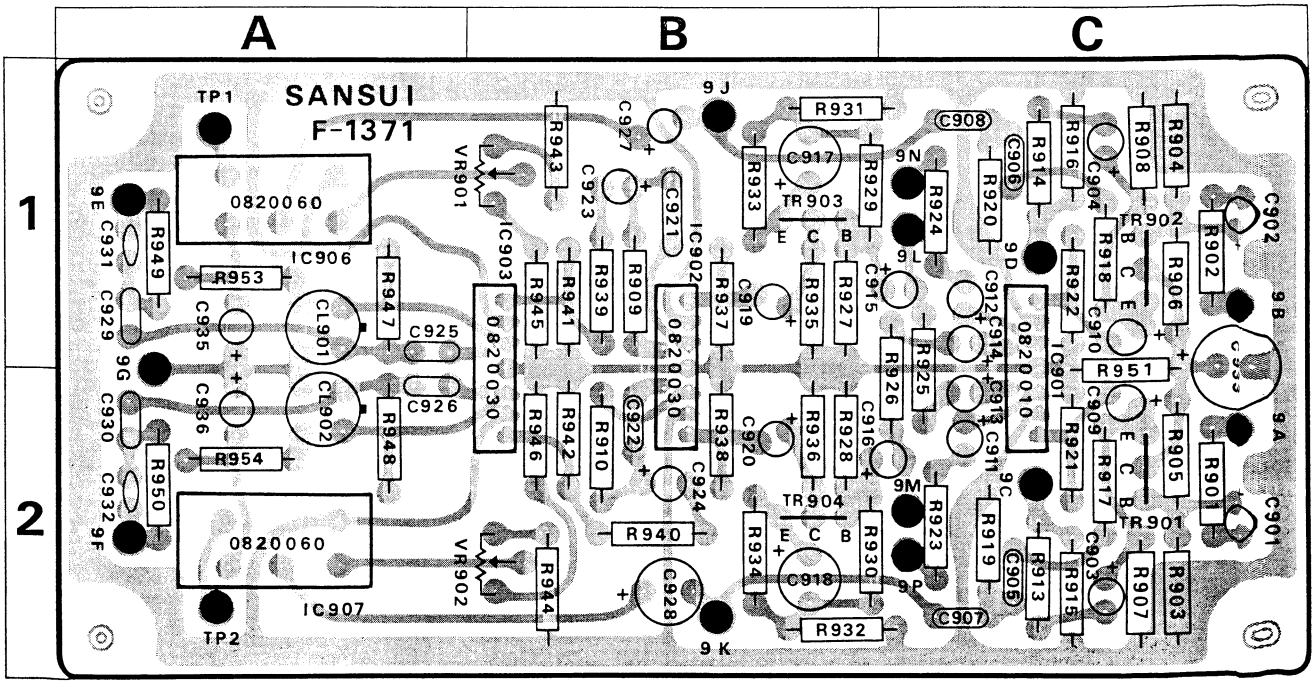
SYNTHESIZER BLOCK 〈F-1371-1〉

W	X	Y	Z
R901	1kΩ	0101102	2C
R902	1kΩ	0101102	1C
R903	150kΩ	0101154	2C
R904	150kΩ	0101154	1C
R905	100kΩ	0101104	2C
R906	100kΩ	0101104	1C
R907	6.8kΩ	0101682	2C
R908	6.8kΩ	0101682	1C
R909	5.6kΩ	0101562	1B
R910	5.6kΩ	0101562	2B
R913	56kΩ	0101563	2C
R914	56kΩ	0101563	1C
R915	18kΩ	0101183	2C
R616	18kΩ	0101183	1C
R917	10kΩ	0101103	2C
R918	10kΩ	0101103	1C
R919	8.2kΩ	0101822	2C
R920	8.2kΩ	0101822	1C
R921	100kΩ	0101104	2C
R922	100kΩ	0101104	1C
R923	4.7kΩ	0101472	2C
R924	4.7kΩ	0101472	1C
R925	15kΩ	0101153	1, 2C
R926	15kΩ	0101153	1, 2C
R927	1MΩ	0101105	1B
R928	1MΩ	0101105	2B
R929	56kΩ	0101563	1B
R930	56kΩ	0101563	2B

(X: ±10% 1/4W CR.)

W	X	Y	Z
R931	1.5kΩ	0101152	1B, C
R932	1.5kΩ	0101152	2B, C
R933	470Ω	0101471	1B
R934	470Ω	0101471	2B
R935	22kΩ	0101223	1B
R936	22kΩ	0101223	2B
R937	100kΩ	0101104	1B
R938	100kΩ	0101104	2B
R939	68kΩ	0101683	1B
R940	68kΩ	0101683	2B
R941	100kΩ	0101104	1B
R942	100kΩ	0101104	2B
R943	4.7Ω	0101479	1B
R944	4.7Ω	0101479	2B
R945	15kΩ	0101153	1B
R946	15kΩ	0101153	2B
R947	39kΩ	0101393	1A
R948	39kΩ	0101393	2A
R949	560kΩ	0101564	1A
R950	560kΩ	0101564	2A
R951	470Ω	0101471	1C
R953	22Ω	0101220	1A
R954	22Ω	0101220	2A
R961	470kΩ	0101474	
R962	470kΩ	0101474	
R963	820kΩ	0101824	
R964	820kΩ	0101824	
VR901	2kΩ (B)	1032070	1B
VR902	2kΩ (B)	1032070	2B

(X: ±10% 1/4W CR.)



PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

SYNTHESIZER BLOCK ⟨F-1371⟩ cont'd

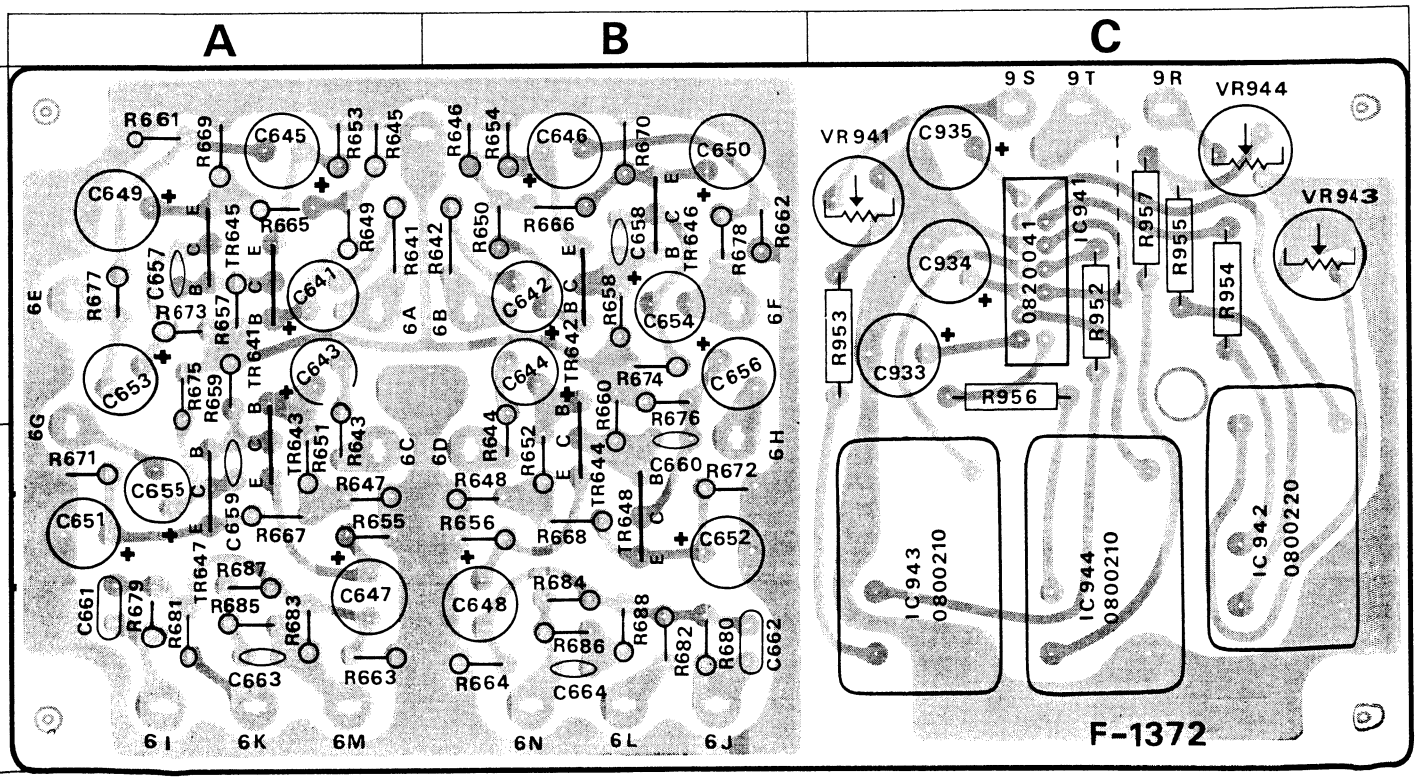
W	X	Y	Z
C901	0.47μF ±20% 25 V AEC.	0563478	2C
C902	0.47μF	0563478	1C
C903	0.68μF ±20% 25 V AEC.	0563688	2C
C704	0.68μF	0563368	1C
C905	0.047μF	0601477	2C
C906	0.047μF	0601477	1C
C907	0.047μF ±10% 50 V MC.	0601477	2C
C908	0.047μF	0601477	1C
C909	1μF	0515109	2C
C910	1μF	0515109	1C
C911	1μF	0515109	2C
C912	1μF	0515109	1C
C913	1μF 50 V EC.	0515109	2C
C914	1μF	0515109	1C
C915	1μF	0515109	1C
C916	1μF	0515109	2B, C
C917	100μF 6.3 V EC.	0510101	1B
C918	100μF	0510101	2B
C919	1μF 50 V EC.	0515109	1B
C920	1μF	0515109	2B
C921	0.1μF	0601108	1B
C922	0.047μF ±10% 50 V MC.	0601477	2B
C923	1μF 50 V EC.	0515109	1B
C924	1μF	0515109	2B
C925	0.0033μF	0601336	1A
C926	0.0033μF ±10% 50 V MC.	0601336	2A
C927	1μF 50 V EC.	0515109	1B
C928	1μF	0515109	2B
C929	0.047μF	0601477	1A
C930	0.047μF ±10% 50 V MC.	0601477	2A
C931	12pF	0660120	1A
C932	12pF ±10% 50 V CC.	0660120	2A
C933	100μF 25 V EC.	0513101	1, 2C
C937	15pF	0660150	
C938	15pF ±10% 50 V CC.	0660150	
TR901	2SC458LG (B, C)	0305313, 4	2C
TR902		0305313, 4	1C
TR903		0305313, 4	1B
TR904		0305313, 4	2B
IC901	Hybrid IC	0820010	1, 2C
IC902		0820030	1, 2B
IC903		0820030	1, 2B
IC906		0820070	1A
IC907		0820070	2A
CL901	MCL-706	0920021	1A
CL902		0920021	2A

PHASE MODULATOR BLOCK ⟨F-1372⟩

W	X	Y	Z
R641	1kΩ	0101102	1A
R642	1kΩ	0101102	1B
R643	1kΩ	0101102	1, 2A
R644	1kΩ	0101102	1, 2B
R645	120kΩ	0101124	1A
R646	120kΩ	0101124	1B
R647	120kΩ	0101124	2A
R648	120kΩ	0101124	2B
R649	39kΩ	0101393	1A
R650	39kΩ	0101393	1B
R651	39kΩ	0101393	2A
R652	39kΩ	0101393	2B
R653	2.2kΩ	0101222	1A
R654	2.2kΩ	0101222	1B
R655	2.2kΩ	0101222	2A
R656	2.2kΩ	0101222	2B
R657	100kΩ	0101104	1A
R658	100kΩ	0101104	1B
R659	100kΩ	0101104	1A
R660	100kΩ	0101104	1, 2B
R661	1kΩ	0101102	1A
R662	1kΩ	0101102	1B 2B
R663	1.5kΩ	0101152	2A
R664	1.5kΩ ±10% ¼W CR.	0101152	2B
R665	68kΩ	0101683	1A
R666	68kΩ	0101683	1B
R667	68kΩ	0101683	2A
R668	68kΩ	0101683	2B
R669	820Ω	0101821	1A
R670	820Ω	0101821	1B
R671	820Ω	0101821	2A
R672	820Ω	0101821	2B
R673	6.8kΩ	0101682	1A
R674	6.8kΩ	0101682	1B
R675	6.8kΩ	0101682	1A
R676	6.8kΩ	0101682	1B
R677	10kΩ	0101103	1A
R678	10kΩ	0101103	1B
R679	10kΩ	0101103	2A
R680	10kΩ	0101103	2B
R952	18kΩ	0101183	1C
R953	39kΩ	0101393	1C
R954	33kΩ	0101333	1C
R955	150kΩ	0101154	1C
R956	33kΩ	0101333	1C
R957	120kΩ	0101124	1C
VR941	47kΩ (B)	1035170	1C
VR943	47kΩ (B)	1035170	1C
VR944	47kΩ (B)	1035170	1C
C641	1.5μF	0579003	1A
C642	1.5μF	0579003	1B
C643	1.5μF 15 V TC.	0579003	1A
C644	1.5μF	0579003	1B
C645	33μF	0510330	1A
C646	33μF 6.3 V EC.	0510330	1B

W	X		Y	Z
C647	100μF		0510101	2 A
C648	100μF		0510101	2 B
C649	100μF		0510101	1 A
C650	100μF	6.3 V EC.	0510101	1 B
C651	100μF		0510101	2 A
C652	100μF		0510101	2 B
C653	10μF		0513100	1 A
C654	10μF		0513100	1 B
C655	10μF	25 V EC.	0513100	2 A
C656	10μF		0513100	1 B
C657	47pF		0660470	1 A
C658	47pF		0660470	1 B
C659	100pF	±10% 50 V CC.	0660101	2 A
C660	100pF		0660101	2 B
C933	100μF		0510101	1 C
C934	100μF	6.3 V EC.	0510101	1 C
C935	100μF		0510101	1 C
TR641			0305475	1 A
TR642			0305475	1 B
TR643			0305475	1, 2 A
TR644			0305475	1, 2 B
TR645	2SC871R (F)		0305475	1 A
TR646			0305475	1 B
TR647			0305475	2 A
TR648			0305475	2 B

W	X	Y	Z
IC941	Hybrid IC	0820040	1 C
IC942		0800220	1, 2 C
IC943		0800210	2 C
IC944		0800210	2 C



PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

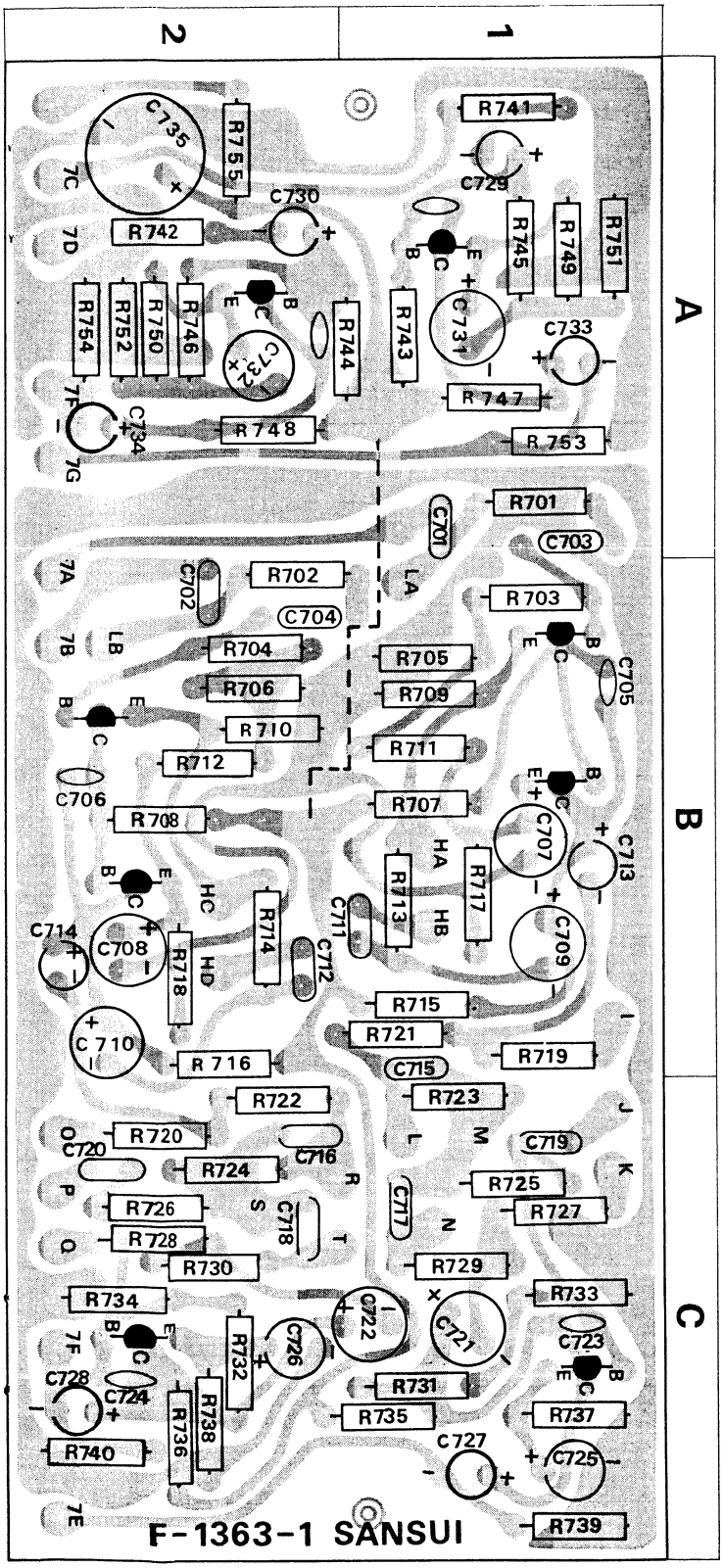
TONE BLOCK 〈F-1363-1〉

W	X	Y	Z
R701	1kΩ	0101102	1 A
R702	1kΩ	0101102	2 B
R703	100kΩ	0101104	1 B
R704	100kΩ	0101104	2 B
R705	39kΩ	0101393	1 B
R706	39kΩ	0101393	2 B
R707	100kΩ	0101104	1 B
R708	100kΩ	0101104	2 B
R709	4.7kΩ	0101472	1 B
R710	4.7kΩ	0101472	2 B
R711	47kΩ	0101473	1 B
R712	47kΩ	0101473	2 B
R713	10kΩ	0101103	1 B
R714	10kΩ	0101103	2 B
R715	5.6kΩ	0101562	1 B
R716	5.6kΩ	0101562	2 B
R717	1.5kΩ	0101152	1 B
R718	1.5kΩ	0101152	2 B
R719	5.6kΩ	0101562	1 B
R720	5.6kΩ	0101562	2 C
R721	8.2kΩ	0101822	1 B
R722	8.2kΩ	0101822	2 C
R723	220kΩ	0101224	1 C
R724	220kΩ	0101224	2 C
R725	22kΩ	0101223	1 C
R726	22kΩ	0101223	2 C
R727	5.6kΩ	0101562	1 C
R728	5.6kΩ	0101562	2 C
R729	8.2kΩ	0101822	1 C
R730	8.2kΩ	0101822	2 C
R731	390kΩ	0101394	1 C
R732	390kΩ	0101394	2 C
R733	100kΩ	0101104	1 C
R734	100kΩ	0101104	2 C
R735	5.6kΩ	0101562	1 C
R736	5.6kΩ	0101562	2 C
R737	560Ω	0101561	1 C
R738	560Ω	0101561	2 C
R739	100kΩ	0101104	1 C
R740	100kΩ	0101104	2 C
R741	2.2kΩ	0101222	1 A
R742	2.2kΩ	0101222	2 A
R743	470kΩ	0101474	1 A
R744	470kΩ	0101474	1 A
R745	56kΩ	0101563	1 A
R746	56kΩ	0101563	2 A
R747	12kΩ	0101123	1 A
R748	12kΩ	0101123	2 A
R749	2.2kΩ	0101222	1 A
R750	2.2kΩ	0101222	2 A
R751	3.9kΩ	0101392	1 A
R752	3.9kΩ	0101392	2 A
R753	100kΩ	0101104	1 A
R754	100kΩ	0101104	2 A
R755	100Ω	0101101	2 A

(R728–R755: ±10% ¼W CR.)

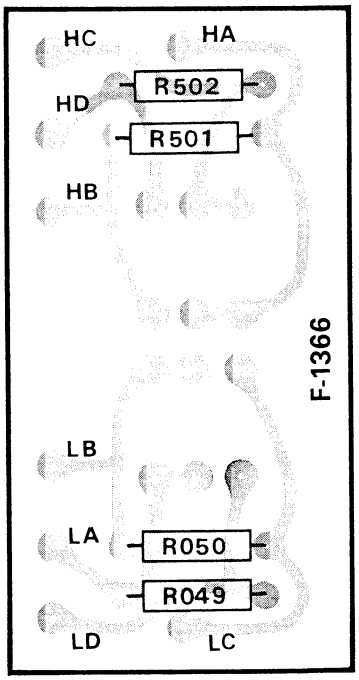
W	X	Y	Z
C701	0.01μF	0601107	1 A
C702	0.01μF	0601107	2 B
C703	0.22μF	0601228	1 A
C704	0.22μF	0601228	2 B
C705	100pF	0660101	1 B
C706	100pF	0660101	2 B
C707	33μF	0510330	1 B
C708	33μF	0510330	2 B
C709	33μF	0512330	1 B
C710	33μF	0512330	2 B
C711	0.015μF	0601157	1 B
C712	0.015μF	0601157	2 B
C713	1μF	0515109	1 B
C714	1μF	0515109	2 B
C715	0.04μF	0601407	1 B
C716	0.04μF	0601407	2 C
C717	0.04μF	0601407	1 C
C718	0.04μF	0601407	2 C
C719	0.0015μF	0601156	1 C
C720	0.0015μF	0601156	2 C
C721	10μF	0515109	1 C
C722	10μF	0515109	1 C
C723	68pF	0660680	1 C
C724	68pF	0660680	2 C
C725	47μF	0511470	1 C
C726	47μF	0511470	2 C
C727	1μF	0515109	1 C
C728	1μF	0515109	2 C
C729	1μF	0515109	1 A
C730	1μF	0515109	2 A
C731	47μF	0511470	1 A
C732	47μF	0511470	2 A
C733	1μF	0515109	1 A
C734	1μF	0515109	2 A
C735	100μF	0513101	2 A
TR701	2SC871 (E, F)	0305471, 2	1 B
TR702	2SC871 (E, F)	0305471, 2	2 B
TR703	2SC871 (E, F)	0305471, 2	1 B
TR704	2SC871 (E, F)	0305471, 2	2 B
TR705	2SC871 (F)	0305472	1 C
TR706	2SC871 (F)	0305472	2 C
TR707	2SC871 (F)	0305472	1 A
TR708	2SC871 (F)	0305472	2 A

(C701–C704: ±10% 50 V MC.; C705–C706: ±10% 50 V CC.; C707–C708: 6.3 V EC.; C709–C710: 16 V EC.; C711–C712: ±10% 50 V MC.; C713–C714: 50 V EC.; C715–C720: ±10% 50 V MC.; C721–C722: 50 V EC.; C723–C724: ±10% 50 V CC.; C725–C726: 10 V EC.; C727–C730: 50 V EC.; C731–C732: 10 V EC.; C733–C734: 50 V EC.; C735: 25 V EC.)



FILTER BLOCK ⟨F-1366⟩

W	X	Y
R049	1MΩ	0101105
R050	1MΩ	0101105
R051	1MΩ	0101105
R052	1MΩ	0101105
	±10% ¼W CR.	
S9(a,b)	High Filter Switch	1130380
S10(a,b)	Low Filter Switch	



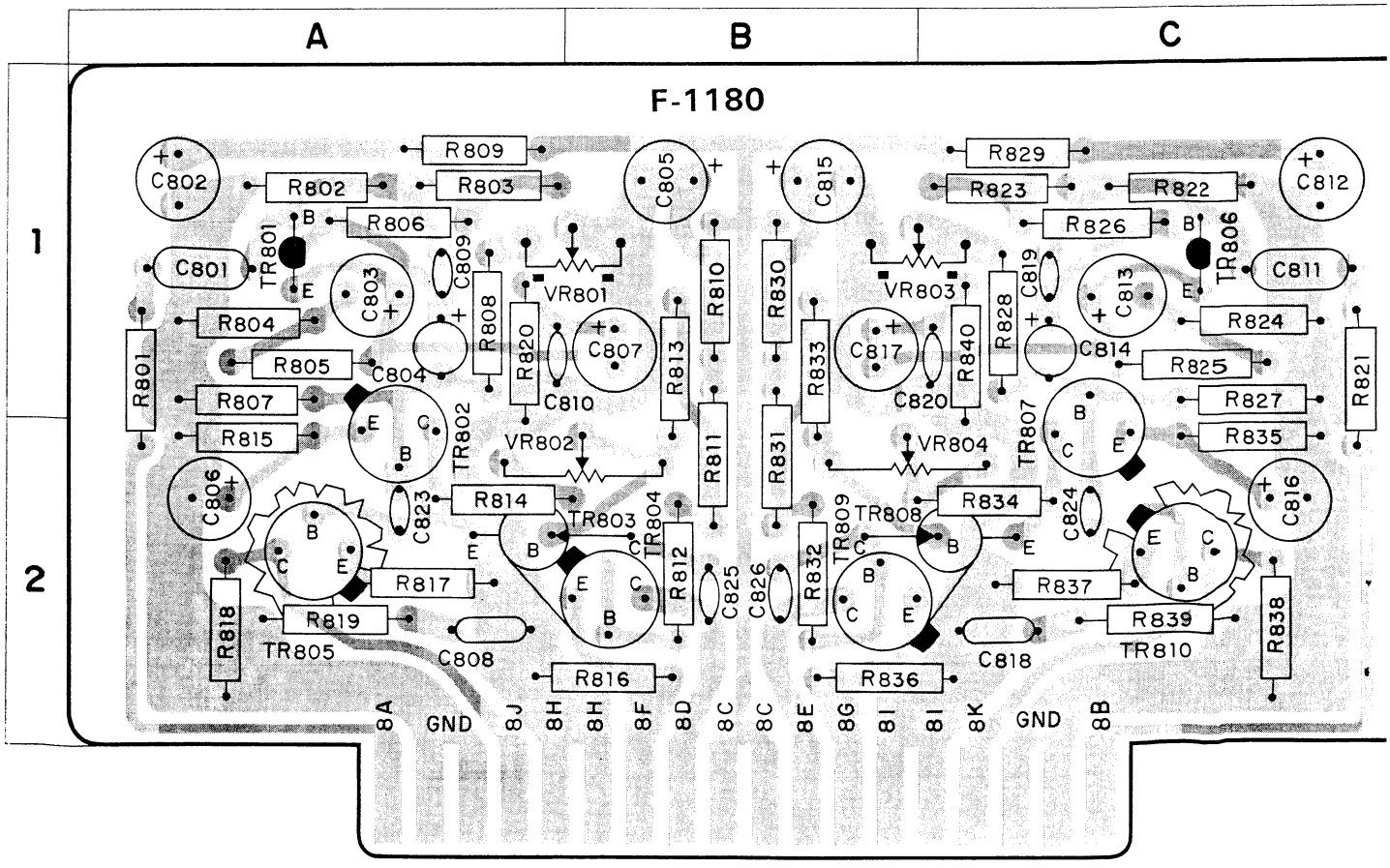
PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

DRIVER BLOCK 〈F-1180E〉

W	X	Y	Z
R801	2.2kΩ ±10% ¼W CR.	0101222	1 A
R802	150kΩ ±10% ¼W CR.	0101154	1 A
R803	560kΩ ±10% ¼W CR.	0101564	1 A
R804	470Ω ±10% ¼W CR.	0101471	1 A
R805	3.3kΩ ±10% ¼W CR.	0101332	1 A
R806	3.3kΩ ±10% ¼W CR.	0101332	1 A
R807	10kΩ ±10% ¼W CR.	0101103	1 A
R808	47kΩ ±10% ¼W CR.	0101473	1 A
R809	56kΩ ±10% ¼W CR.	0101563	1 A
R810	1.8kΩ ±10% ¼W CR.	0101182	1 B
R811	3.9kΩ ±10% ¼W CR.	0101392	2 B
R812	39Ω ±10% ¼W CR.	0101390	2 B
R813	3.3kΩ ±10% ¼W CR.	0101332	1 B
R814	1.5kΩ ±10% ¼W CR.	0101152	2 A
R815	220Ω ±10% ¼W CR.	0101221	2 A
R816	100Ω ±10% ¼W CR.	0101101	2 B
R817	4.7Ω ±10% ¼W CR.	0101479	2 A
R818	100Ω ±10% ¼W CR.	0101101	2 A
R819	6.8Ω ±10Ω ½W SR.	0101689	2 A
R820	8.2kΩ ±10% ¼W CR.	0101822	1 A
R821	2.2kΩ ±10% ¼W CR.	0101222	1 C
R822	150kΩ ±10% ¼W CR.	0101154	1 C
R823	560kΩ ±10% ¼W CR.	0101564	1 C

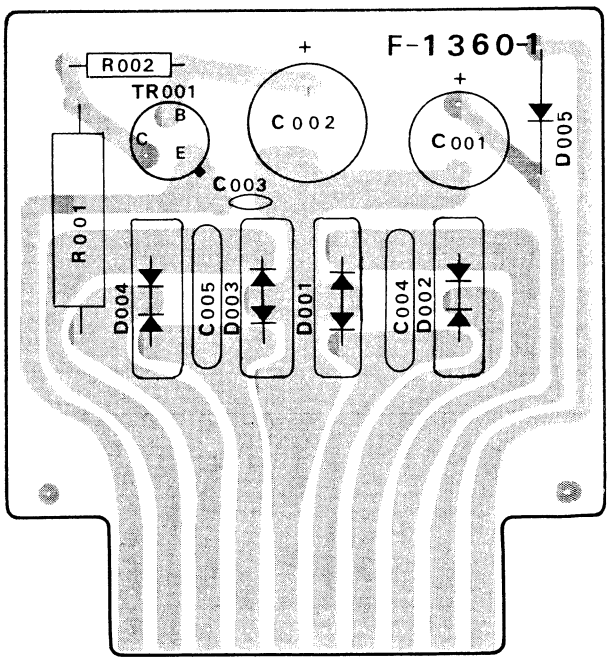
W	X	Y	Z
R824	470Ω ±10% ¼W CR.	0101479	1 C
R825	3.3kΩ ±10% ¼W CR.	0101332	1 C
R826	3.3kΩ ±10% ¼W CR.	0101332	1 C
R827	10kΩ ±10% ¼W CR.	0101103	1 C
R828	47kΩ ±10% ¼W CR.	0101473	1 C
R829	56kΩ ±10% ¼W CR.	0101563	1 C
R830	1.8kΩ ±10% ¼W CR.	0101182	1 B
R831	3.9kΩ ±10% ¼W CR.	0101392	2 B
R832	39Ω ±10% ¼W CR.	0101390	2 B
R833	3.3kΩ ±10% ¼W CR.	0101332	1 B
R834	1.5kΩ ±10% ¼W CR.	0101152	2 C
R835	220Ω ±10% ¼W CR.	0101221	2 C
R836	100Ω ±10% ¼W CR.	0101101	2 B
R837	4.7Ω ±10% ¼W CR.	0101479	2 C
R838	100Ω ±10% ¼W CR.	0101101	2 C
R839	6.8Ω ±10% ½W SR.	0101689	2 C
R840	8.2kΩ ±10% ¼W CR.	0101822	1 C
C801	0.22μF ±10% 50 V MC.	0601228	1 A
C802	100μF 25 V EC.	0513101	1 A
C803	220μF 10 V EC.	0511221	1 A
C804	1μF 50 V EC.	0515109	1 A
C805	33μF 50 V EC.	0515330	1 B



W	X	Y	Z
C806	100μF 6.3 V EC.	0510101	2 A
C807	10μF 50 V EC.	0515100	1 B
C808	0.047μF ±10% 50 V MC.	0601477	2 A
C809	47pF ±10½ 50 V CC.	0660470	1 A
C811	0.22μF ±10% 50 V MC.	0601228	1 C
C812	100μF 25 V EC.	0513101	1 C
C813	220μF 10 V EC.	0511221	1 C
C814	1μF 50 V EC.	0515109	1 C
C815	33μF 50 V EC.	0515330	1 B
C816	100μF 6.3 V EC.	0510101	2 C
C817	10μF 50 V EC.	0515100	1 B
C818	0.047μF ±10% 50 V MC.	0601477	2 C
C819	47pF ±10½ 50 V CC.	0660470	1 C
C823	47pF	0660470	2 A
C824	47pF	0660470	2 C
C825	330pF	0660331	2 B
C826	330pF	0660331	2 B
VR801	200kΩ (B) AC Balance Adjustor	1030150	1 A, B
VR802	1kΩ (B) DC Bias Adjustor	1030690	2 A, B
VR803	200kΩ (B) AC Balance Adjustor	1030150	1 B, C
VR804	1kΩ (B) DC Bias Adjustor	1030690	2 B, C
TR801	2SC458LG (B)	0305310	1 A
TR802	2SC1124 (2, 3)	0305900,1,2	2 A
TR803	2SC281 (B)	0305141	2 A, B
TR804	2SC959 (L, M)	0305741, 2	2 B
TR805	2SA606 (L, M)	0300211, 2	2 A
TR806	2SC458LG (B)	0305310	1 C
TR807	2SC1124 (2, 3)	0305900,1,2	2 C
TR808	2SC281 (B)	0305141	2 B, C
TR809	2SC959 (L, M)	0305741, 2	2 B
TR810	2SA606 (L, M)	0300211, 2	2 C

POWER BLOCK 〈F-1360-1〉

W	X	Y
R001	47Ω ±10% 2 W CeR.	0152470
R002	12kΩ ±10% ¼W CR.	0101123
C001	1000μF 10 V EC.	0511102
C002	100μF 75 V EC.	0519301
C003	0.022μF +80 −20% 50 V CC.	0657223
C004	0.0047μF +80 −20% 500V CC.	0659012
C005	0.0047μF +80 −20% 500V CC.	0659012
TR001	2SC959 (L, M)	0305741, 2
D001	ESAC02N-03	0310910
D002	ESAC02C-03	0310900
D003	ESAC02N-03	0310910
D004	ESAC02C-03	0310900
D005	10D1	0310340



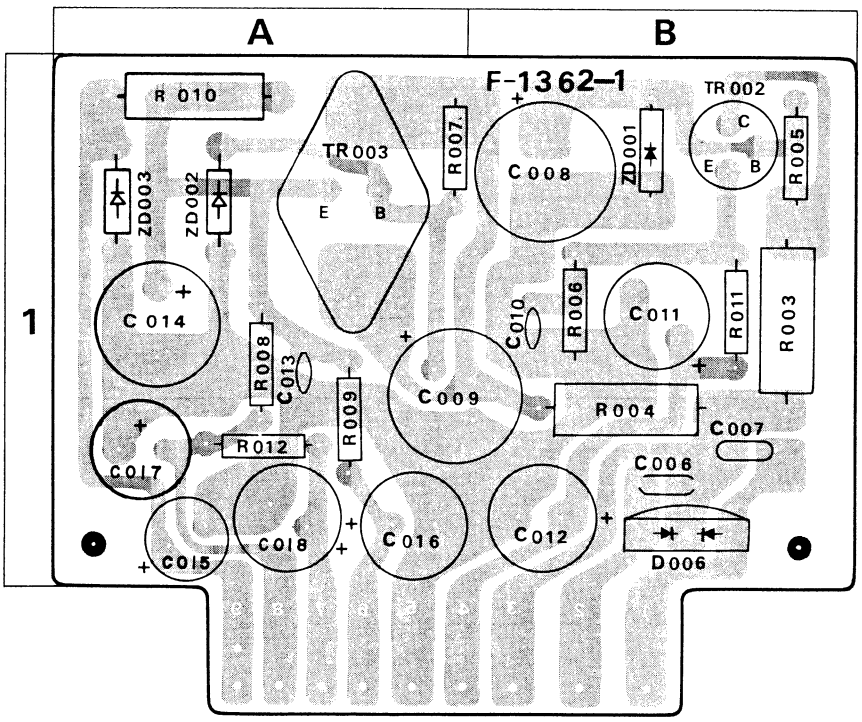
PRINTED CIRCUIT BOARDS AND PARTS LIST

W: Parts No. **X:** Parts Name **Y:** Stock No. **Z:** Position of Parts

POWER BLOCK 〈F-1362-1〉

W	X	Y	Z
R003	100Ω } ±10% 2W CeR.	0152101	1 B
R004	22Ω }	0152220	1 B
R005	3.3kΩ ±10% ¼W CR.	0101332	1 B
R007	1.2kΩ ±10% ¼W CR.	0101122	1 A
R008	47Ω ±10% ½W SR.	0111470	1 A
R009	820Ω ±10% ¼W CR.	0101821	1 A
R010	270Ω ±10% 2W CeR.	0152271	1 A
R011	10Ω ±10% ¼W CR.	0101100	1 B
C006	0.01μF } +80 −20 % 500V CC.	0659011	1 B
C007	0.01μF }	0659011	1 B
C008	220μF } 50 V EC.	0515221	1 B
C009	220μF }	0515221	1 A, B
C010	0.022μF +80 −20 % 50 V CC.	0657223	1 B
C012	470μF 25 V EC.	0513221	1 B

W	X	Y	Z
C013	0.022μF +80 −20 % 50 V CC.	0657223	1 A
C014	220μF 50 V EC.	0515221	1 A
C015	100μF 16 V EC.	0512101	1 A
C016	220μF }	0513221	1 A
C017	220μF } 25 V EC.	0513221	1 A
C018	220μF }	0513221	1 A
TR002	2SC971 (2, 3)	0305530, 1	1 B
TR003	2SD92 (Y, BL)	0308072, 3	1 A
D006	10DC-IN	0310680	1 B
ZD001	RD24A (M, N)	0315410, 20	1 B
ZD002	ZB1-27A	0315110	1 A
ZD003	RD13A (L, M)	0315290, 300	1 A



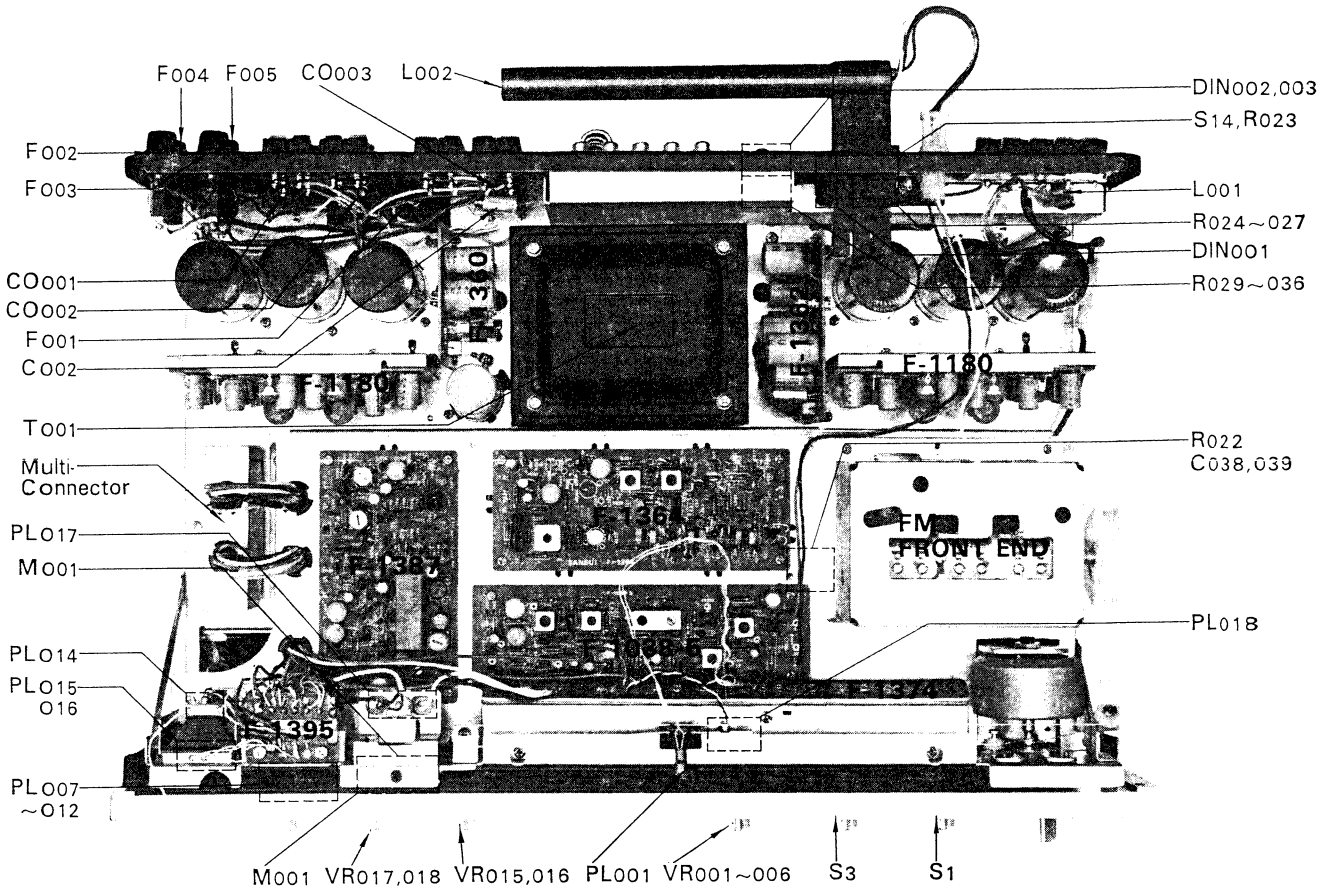
OTHER PARTS AND THEIR POSITION ON CAHSSIS

W: Parts No. **X:** Parts Name **Y:** Stock No.

W	X	Y
R022	47Ω ±10% ¼W CR.	0101470
R023	5.6kΩ ±10% ¼W CR.	0101562
R024	100kΩ ±10% ¼W CR.	0101104
R025	100kΩ ±10% ¼W CR.	0101104
R026	390kΩ ±10% ¼W CR.	0101392
R027	390kΩ ±10% ¼W CR.	0101392
R028	18kΩ ±10% ¼W CR.	0101183
R029	100kΩ ±10% ¼W CR.	0101104
R030	100kΩ ±10% ¼W CR.	0101104
R031	390kΩ ±10% ¼W CR.	0101392
R032	390kΩ ±10% ¼W CR.	0101392
R033	100kΩ ±10% ¼W CR.	0101104
R034	100kΩ ±10% ¼W CR.	0101104
R035	390kΩ ±10% ¼W CR.	0101394
R036	390kΩ ±10% ¼W CR.	0101394
R037	8.2kΩ ±10% ¼W CR.	0101822
R038	8.2kΩ ±10% ¼W CR.	0101822
R053	330Ω ±10% ½W SR.	0111331
R054	330Ω ±10% ½W SR.	0111331
R055	330Ω ±10% ½W SR.	0111331
R056	330Ω ±10% ½W SR.	0111331
R057	0.47Ω ±10% 2W CeR.	0152478
R058	0.47Ω ±10% 2W CeR.	0152478
R059	0.47Ω ±10% 2W CeR.	0152478
R060	0.47Ω ±10% 2W CeR.	0152478
R061	0.47Ω ±10% 2W CeR.	0152478
R062	0.47Ω ±10% 2W CeR.	0152478
R063	0.47Ω ±10% 2W CeR.	0152478
R064	0.47Ω ±10% 2W CeR.	0152478
R065	27kΩ ±10% ¼W CR.	0101273
R066	24kΩ ±10% ¼W CR.	0101273
R067	47kΩ ±10% ¼W CR.	0101473
R068	47kΩ ±10% ¼W CR.	0101473
R069	560Ω ±10% ½W SR.	0111561
R072	560Ω ±10% ½W SR.	0111561
R073	4.7Ω ±10% ½W SR.	0111479
VR001~006	250kΩ(B)×4, 100kΩ(B)×2 Volume	1090020, 1
		1090020, 1
VR007, 008	250kΩ(MN) Front Balance	1040090, 1
VR009, 010	250kΩ(MN) Rear Balance	1040090, 1
VR011~014	250kΩ(MN)×2 Main Balance	1040100, 1
VR015, 016	100kΩ(B)×2 Treble	1020130, 1
VR017, 018	100kΩ(B)×2 Bass	1020130, 1
C021	0.022μF 600V OC.	0591227
C022	0.0047μF 600V OC.	0591476
C023	2200μF 80 V EC.	0559820
C024	2200μF 80 V EC.	0559820
C025	1000μF 50 V EC.	0559304
C034	2200μF 80 V EC.	0559820
C035	2200μF 80 V EC.	0559820
C036	2200μF 80 V EC.	0559820
C037	2200μF 80 V EC.	0559820
C038	0.022μF +80% −20% 25 V CC.	0656223
C039	0.022μF +80% −20% 25 V CC.	0656223
C040	47μF 6.3 V EC.	0510470
C041	330μF 25 V EC.	0513331
TR004	2SD180 (L, M, N)	0308061, 2, 3
TR005	2SD180 (L, M, N)	0308061, 2, 3

W	X	Y
TR006	2SD180 (L, M, N)	0308061, 2, 3
TR007	2SD180 (L, M, N)	0308061, 2, 3
TR008	2SD180 (L, M, N)	0308061, 2, 3
TR009	2SD180 (L, M, N)	0308061, 2, 3
TR010	2SD180 (L, M, N)	0308061, 2, 3
TR011	2SD180 (L, M, N)	0308061, 2, 3
S1(a~n)	Selector Switch	1105110, 1
S2(a~f)	Function Switch	1102320
S3(a~g)	Mode Switch	1103391
S11(a~b)	Front Speakers Switch Y-1-4-4	1101360, 1
S12(a~b)	Rear Speakers Switch Y-1-4-4	1101360, 1
S13	Power Switch	1130350
S14	AM Antenna Switch	1110090
T001	Power Transformer	4001000
L001	300Ω : 75Ω FM balloon	4290021
L002	AM Bar Antenna	4200490
J001	Headphones Jack (Front)	2430071
J002	Headphones Jack (Rear)	2430071
J003	Tape Rec. 2 Jack	2430060
J004	Tape Mon. 2 Jack	2430060
DIN001	DIN Connector (2-Channel)	2430040
DIN002	DIN Connector (4-Channel Front)	2430040
DIN003	DIN Connector (4-Channel Rear)	2430040
PU001	Voltage Selector Socket	2410170
	Main Voltage Selector Plug	2410180
	Sub Voltage Selector Plug	2410190
CO001~003	AC Outlet	2450040
M001	Signal Meter 200μA	4300470
F001	5A Power Fuse (100~127V)	0430062
	3A Power Fuse (220~250V)	0430020
F002~005	2.5A Quick Acting Fuse	0433242
PL001	6.3V 0.075A Dial Pointer Lamp	0400200
PL007	7V 0.2A PHONO 2 Indicator	0400150
PL008	7V 0.2A PHONO 1 Indicator	0400150
PL009	7V 0.2A FM Indicator	0400150
PL010	7V 0.2A AM Indicator	0400150
PL011	7V 0.2A AUX (2CH) Indicator	0400150
PL012	7V 0.2A AUX (4CH) Indicator	0400150
PL013	7V 0.2A 4-Channel Indicator	0400150
PL014	6.3V 0.075A 2, 4 Digital Indicator	0400154
PL015	6.3V 0.075A 2, 4 Digital Indicator	0400200
PL016	6.3V 0.075A 2, 4 Digital Indicator	0400200
PL017	6 3V 0.25A Signal Meter Lamp	0420020
PL018	6V 0.1A FM Stereo Indicator	0400160

OTHER PARTS AND THEIR POSITION ON CHASSIS



* Manufacturer reserves right to change design and/or specifications without notice for purpose of improvement.